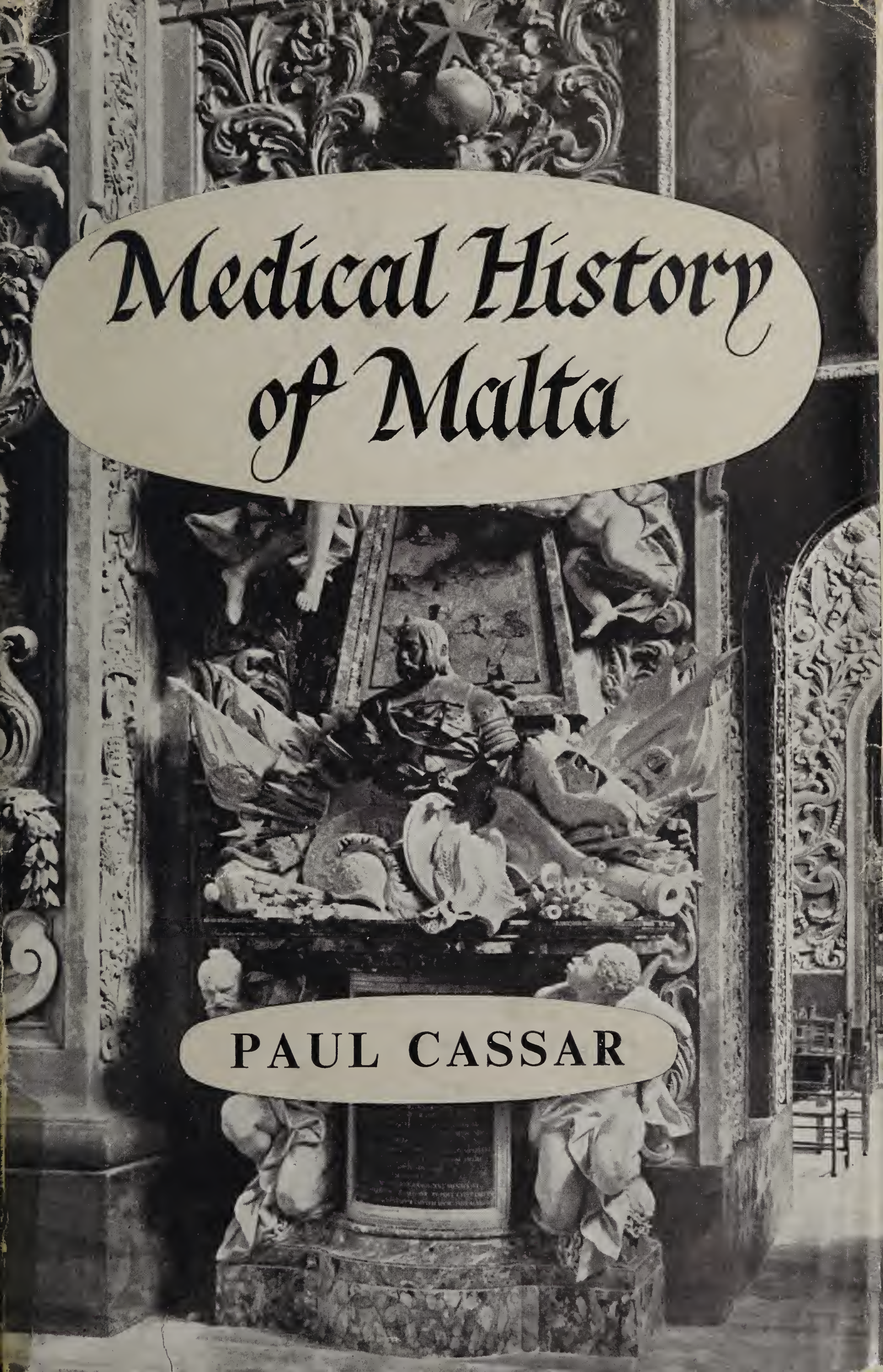
Medical History of Malta



PAUL CASSAR

WT

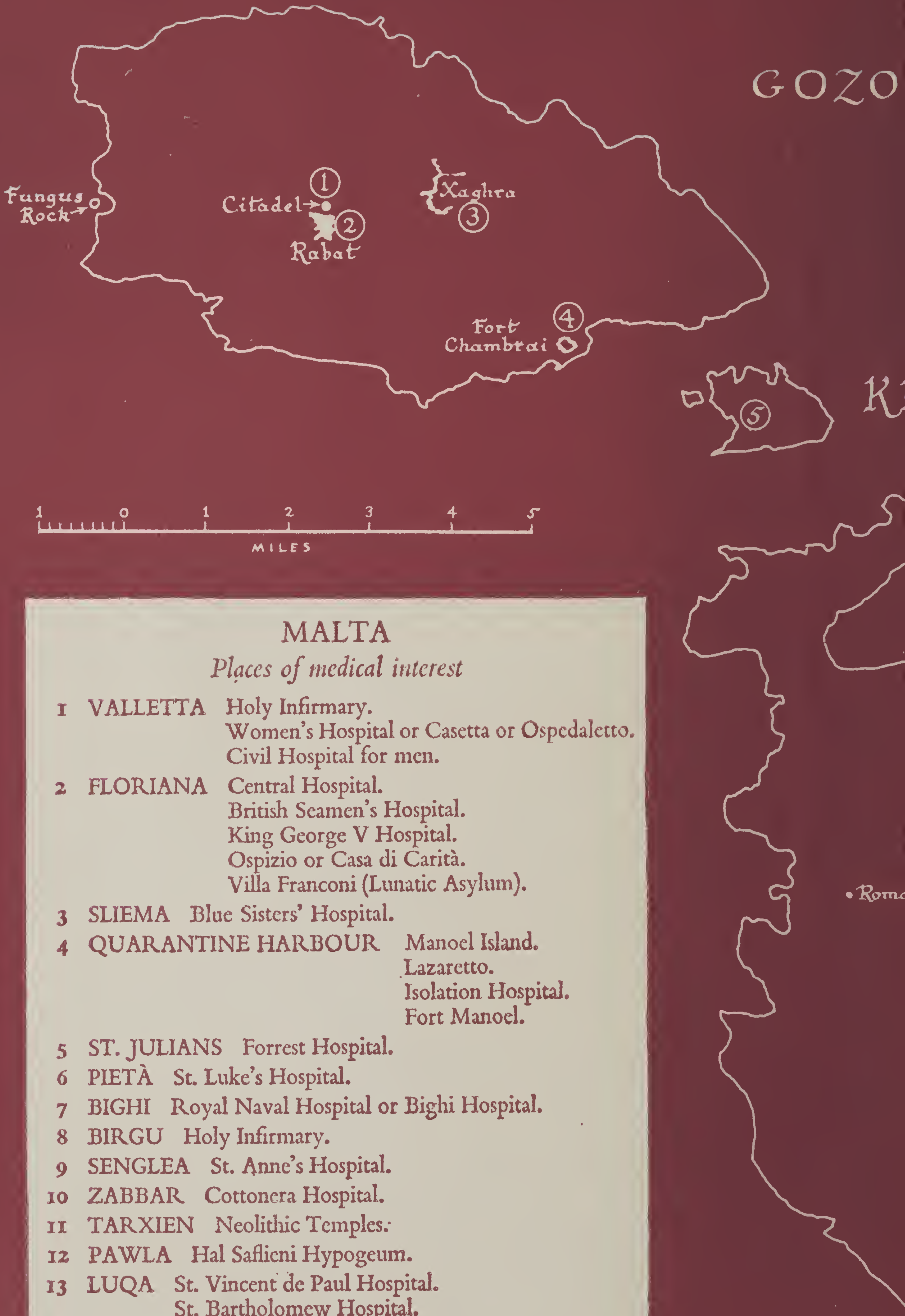
MEDICAL HISTORY OF MALTA

FROM the beginning of history, Malta has been at the very heart of the western world, open to and reflecting all the diverse influences of the Mediterranean civilizations. The peculiar character of the island has enabled Dr. Cassar to present in his *Medical History of Malta* a unique cross-section of the progress of the whole of western medicine from the prehistoric remnants and scattered fragments of medieval times, to the achievements in medical organization which played so important a rôle in the survival of this tiny island during the Second World War.

Under the powerful Order of St. John of Jerusalem which established its rule in the island in the middle of the sixteenth century, medical organization probably reached its peak. For although it was a militant order of Knights, dedicated to unceasing war against the Infidel, the *raison d'être* of the Order was the care of the sick, and its hospitals were renowned throughout Europe for their devotion and efficiency in this cause. Fortunately for posterity, the Order's records have been preserved intact and Dr. Cassar has been able to give an extraordinarily comprehensive picture of the administration of a medieval hospital and the medical care that was available there.

Maltese young men studied medicine and surgery not only in the medical school of Malta but also in the universities of Italy and France, and later England, bringing back the high standards and latest advances of the continental medical schools. It is interesting to note that when mesmerism became fashionable in France in the eighteenth century, the Grandmaster

continued on back flap



MALTA

Places of medical interest

1	VALLETTA	Holy Infirmary. Women's Hospital or Casetta or Ospedaletto. Civil Hospital for men.
2	FLORIANA	Central Hospital. British Seamen's Hospital. King George V Hospital. Ospizio or Casa di Carità. Villa Franconi (Lunatic Asylum).
3	SLIEMA	Blue Sisters' Hospital.
4	QUARANTINE HARBOUR	Manoel Island. Lazaretto. Isolation Hospital. Fort Manoel.
5	ST. JULIANS	Forrest Hospital.
6	PIETÀ	St. Luke's Hospital.
7	BIGHI	Royal Naval Hospital or Bighi Hospital.
8	BIRGU	Holy Infirmary.
9	SENGLEA	St. Anne's Hospital.
10	ZABBAR	Cottonera Hospital.
11	TARXIEN	Neolithic Temples.
12	PAWLA	Hal Saflieni Hypogeum.
13	LUQA	St. Vincent de Paul Hospital. St. Bartholomew Hospital.
14	ZEBBUG	St. Joseph Hospital.
15	ATTARD	Mental Hospital.
16	MDINA	St. Peter Hospital. Connaught Hospital.
17	RABAT	St. Francis Hospital or Santo Spirito Hospital. Saura Hospital. St. Dominic Priory Hospital.

22502994891

GOZO and KEMMUNA

Places of medical interest

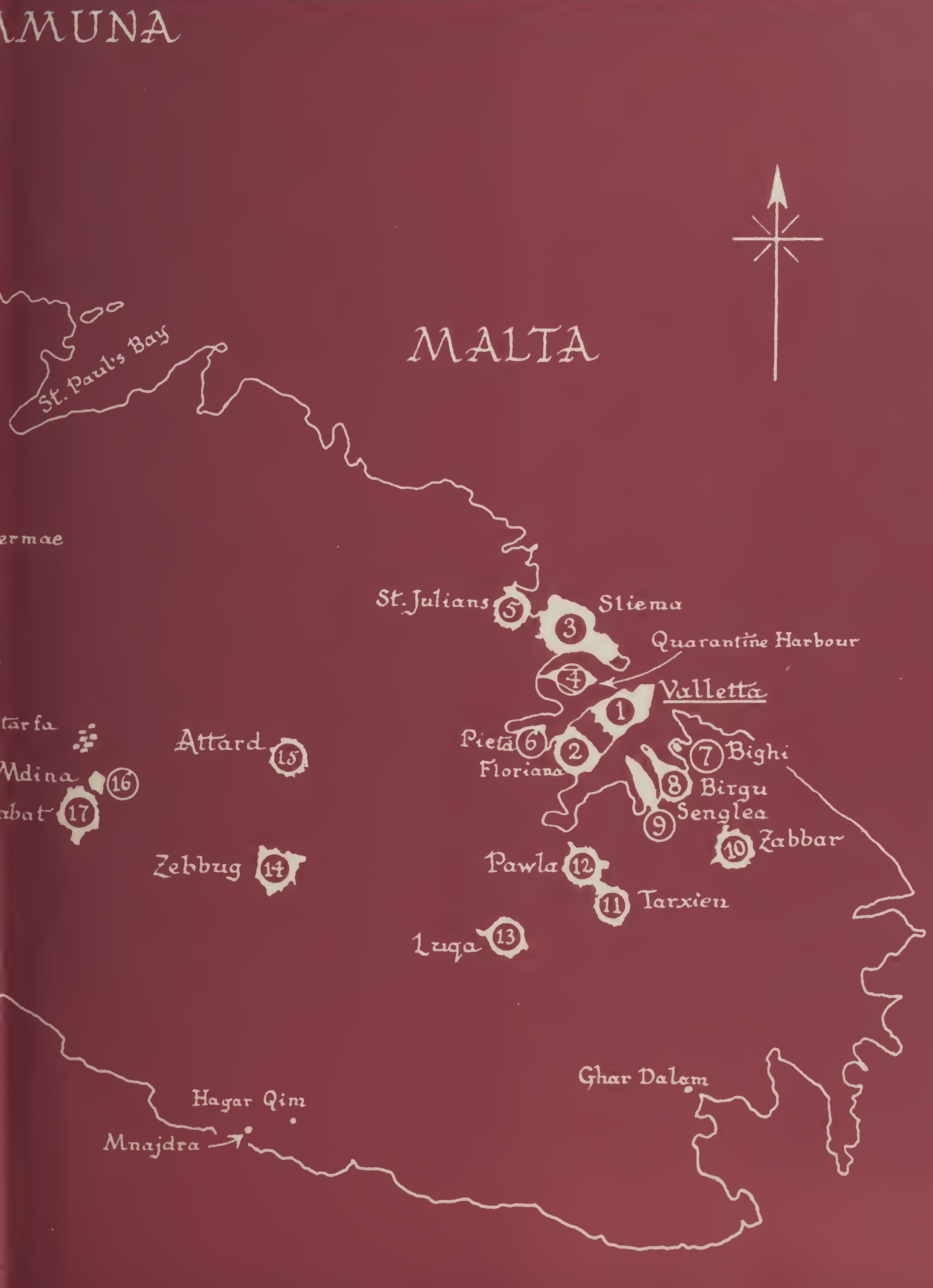
1 CITADEL Hospital of St. Julian or of St. John the Evangelist or of SS. Cosmas and Damian.

2 RABAT (Victoria) St. John the Baptist.

3 XAGHRA Ggantija Neolithic Temples.

4 FORT CHAMBRAI Mental Hospital.
Sacred Heart Hospital.

5 KEMMUNA Isolation Hospital.



PUBLICATIONS OF
THE WELLCOME HISTORICAL MEDICAL LIBRARY

(*General Editor:* F. N. L. Poynter, Ph.D.)

New Series, Volume VI

MEDICAL HISTORY OF MALTA

Digitized by the Internet Archive
in 2020 with funding from
Wellcome Library

https://archive.org/details/b32248040

Marble monument at St. John Co-Cathedral, Valletta, of Grandmaster Nicholas Cotoner (1663–1680) founder of the School of Anatomy and Surgery of Malta.

By courtesy of the Director of the National Museum, Valletta

MEDICAL HISTORY OF MALTA

By

PAUL CASSAR
B.Sc., M.D., D.P.M., F.R.Hist.S.

(The Royal University of Malta)

LONDON
WELLCOME HISTORICAL MEDICAL LIBRARY
1964

Wellcome Library
for the History

First published 1965

© Paul Cassar

BW.335

Made and printed in Great Britain by
William Clowes and Sons Ltd., London and Beccles

Contents

Page
Introduction ix

PART I

THE EARLY PERIODS

Chapter
1 Paleolithic Age to Roman Period 3
2 The Middle Ages 11

PART II

HOSPITALS

3 Santo Spirito Hospital 23
4 The Holy Infirmary and the Hospital of the Italian Langue at Birgu 37
5 The Holy Infirmary at Valletta 46
6 Women's Hospitals 68
7 The Civil Hospital for Men at Valletta 77
8 The Central Hospital and St. Luke's Hospital 83
9 Victoria Hospital, Gozo 90
10 Naval and Military Hospitals 93
11 Administration of Hospitals and Charitable Institutions 102

PART III

UNDER THE AEGIS OF THE ORDER OF ST. JOHN

12 The Great Siege of 1565 113
13 The Naval Medical Service 118
14 Surgery at the Holy Infirmary 132
15 Animal Magnetism 144

PART IV

THE PATTERN OF DISEASE IN MALTA

16 'Fevers' 153
17 Malaria 157
18 Plague Epidemics 164
19 Cholera Epidemics 192

Page
20 Leprosy 210
21 Tuberculosis 218
22 Venereal Diseases 224
23 Trachoma 235
24 Brucellosis 240
25 Rabies 248
26 Smallpox 251
27 Influenza 259
28 Poliomyelitis, Leishmaniasis, Diphtheria 262
29 Cerebrospinal Fever, Dengue, Encephalitis Lethargica, Yellow Fever, Typhoid, Typhus 267

PART V

THE EVOLUTION AND DEVELOPMENT OF PUBLIC HEALTH

30 Public Health Administration 273
31 Quarantine 285
32 The Lazaretto and Isolation Hospitals 298
33 Street Hygiene 309
34 Water Supply 316
35 Drainage System 321
36 Housing 326
37 Disposal of the Dead 339

PART VI

COMMUNAL CARE AND WELFARE

38 The District Medical Service 347
39 Child Welfare 352
40 The Care of the Mentally Sick 364
41 The Care of the Aged and Infirm 375
42 Industrial Health 384

PART VII

NURSING AND MIDWIFERY SERVICES

43 Nursing 391
44 Midwifery 412

PART VIII

FROM PRIMITIVE BELIEFS TO SCIENTIFIC THOUGHT

Page
45 Medical Folklore 421
46 Medical Education 437
47 The Practice of Medicine and Surgery 465
48 The Teaching and Practice of Pharmacy 497
49 Dentistry 513

PART IX

THE NINETEENTH CENTURY

50 Famine and Disease 519
51 Landmarks of Progress 528
52 The Beginning of Anaesthesia 544

PART X

THE IMPACT OF WAR

53 The First World War 555
54 The Second World War 558

Index of Proper Names 569

Subject Index 577

List of Plates

Frontispiece: Marble monument at St. John Co-Cathedral, Valletta, of Grandmaster Nicholas Cottoner (1663–1680) founder of the School of Anatomy and Surgery of Malta
I Clay statuette from Tarxien Neolithic temple *facing page* 12
II Silver cup from Santo Spirito Hospital
III The Grandmaster nursing the sick
IV Ground plan of the Holy Infirmary 13
V The old Civil Hospital, Valletta 76
VI The 'cataletto' or covered stretcher
VII Section of a galley
VIII Instruments in use in the eighteenth century in Malta 77
IX Skull showing trephine openings 188
X Plague of 1813. Transport of corpses
XI Plague of 1813. Administration of last sacraments to the sick
XII Professor Sir Themistocles Zammit 189
XIII Letterhead of the Quarantine Office in 1829 300
XIV The 'barriera' at Valletta in the eighteenth century 301
XV The so-called St. Paul's Tongue 428
XVI Diploma of pharmacy of 1770
XVII Pharmacy jars of the time of the Order of St. John of Jerusalem
XVIII Handbill of a dentist printed in Malta in 1765 429

Introduction

THE military and political vicissitudes of the Maltese Islands have long earned them a prominent place in world history. Medical events, however, have not attracted the same degree of attention from the historian, perhaps because they do not possess that colourful quality so characteristic of military exploits and political upheavals. The lack of a spectacular element, however, is no justification for neglecting the study of our medical past; we may, therefore, just as well try to understand how our ancestors trudged through suffering, dismay and defeat caused by diseases arising out of the accumulation of filth; how they lived under the constant threat of illnesses produced by tainted supplies of drinking water; how they risked being exterminated by an uncontrolled rat population that has been responsible for the waves of plague that swept over the Island. Nor must we fail to appreciate the endeavours of our predecessors to stem the onslaught of disablement and death; how several of the medical services that we enjoy to-day have sprung from roots lying deep in the soil prepared by earlier generations; how prejudice hampered the progress of public hygiene during the last century and how advances in the knowledge and the causation of disease and its treatment have shaped the picture of Malta as we see it to-day.

The rapid strides in medical progress achieved during the present century are apt to make us undervalue the work that has gone before and to blind us to the fact that the present is but the outcome of experiences accumulated by those who have preceded us in less enlightened days and that the past still shapes, in many ways, the life of the present. Undoubtedly, as the story told in these pages will show, the failures of our forefathers outnumber their successes but in judging them we must remember to consider our ancestors in accordance with their own contemporary standards and the unavoidable ignorance of their times. A profound and extensive knowledge of medicine and surgery could not be expected of them. After all, we do not possess it even to-day in spite of the technical advances at our disposal; indeed we, too, are confronted with grave medical problems that still defy understanding and control.

Thanks to its central position in the Mediterranean Sea on the route between East and West, the Maltese archipelago has been profoundly influenced by the incessant impact of all the diverse cultural currents that have swept the Mediterranean basin since prehistoric times. An uninterrupted intercourse with Europe has kept us in the main stream of Western civilisation, not only politically and socially, but also educationally. In fact before the establishment of a Surgical School in Malta in

1676—and even for many years afterwards—Maltese young men went to study medicine and surgery in the universities of Italy and France, bringing back to Malta those high standards in all branches of the healing arts reached by continental medical schools. Thus our Island has shared fully in the medical life and progress of Europe.

Yet Malta has not been a mere passive recipient of benefits reaped from the efforts of others. To its famous Holy Infirmary resorted many sick people from Europe to seek relief from disease and suffering in the seventeenth and eighteenth centuries. From Malta hailed the ophthalmic surgeon Joseph Barth who held, in Vienna, the first Chair of Ophthalmology to be established in Europe. It was in Malta, too, that in more recent times the causative germ of brucellosis was discovered by Sir David Bruce in humans and by the Maltese worker Sir Themistocles Zammit in goats. There is no denying that these contributions to the progress of world medicine are few; but we must bear in mind that they have come from a very small group of islands covering an area of just over 117 square miles and inhabited by a community that has gradually grown in numbers from 24,000 in 1547 to its present strength of 320,000 (for the purpose of comparison the area of the Maltese Islands is smaller than that of the Isle of Wight—146 square miles—though they are more thickly populated). Apart from size, economic and political conditions have militated against the pursuit of an active intellectual life for, throughout their long history, the inhabitants of the Maltese Islands have been engaged in the time-consuming task of wresting their livelihood from an almost barren rock that grudgingly yields them subsistence for only part of the year. Considering also that Malta's role in international affairs has always been that of armed vigilance against the rapacity of the powers that have sought to dominate the Mediterranean, it is significant that it has played a part, even though a small one, in the history of world medicine and that, besides bastions and safe harbours, it also possesses a university, incorporating a medical school, which claims to be the oldest in the British Commonwealth overseas.

It is realised that the subject matter of this book is mainly of interest to the medical profession but there is no reason why it should be exclusively so. In writing it, therefore, I have tried to use a language as simple as is consistent with the nature of my enquiry in the hope of reaching as wide a circle of lay readers as possible. As medical developments are closely linked with social and cultural progress they must be viewed against this background if they are to be seen in their proper perspective. An attempt has therefore been made in these pages to portray the unfolding of the medical story of Malta in relation to these forces.

For my facts I have drawn upon both published and unpublished material, the latter being mainly manuscripts preserved in the archives of the Royal Malta Library and of the Medical and Health Department. To retain the human touch in the story I have preferred, where possible, to allow contemporary witnesses to speak for themselves, whether it was praise or criticism they had to offer. In every instance I have given the source of my information.

I have been fortunate in being able to avail myself of two private Melitensia collections of books, that of Chevalier Joseph Galea of Mdina and that of Dr. Albert Ganado, LL.D., of Valletta, who not only allowed me to make use of their libraries but also indicated sources of information. I wish to thank them and also His Grace the Archbishop of Malta and the Chief Government Medical Officer for allowing me access to the archives of the Archiepiscopal Curia and the Medical and Health Department respectively. I am also grateful to the editors of *Scientia*, *Melita Historica* and the *Chestpiece* for permission to make use of material I have already published in their journals.

I also feel obliged to Capt. C. Zammit, F.S.A., Director of the National Museum, Valletta, for designing the maps and the dust cover and for kindly permitting me to use objects in the Museum for illustrations; and to Mr. Joseph Spiteri of the same department for his valuable photographic assistance.

Finally I offer my thanks to the staff of the Royal Malta Library who, for a period of eight years, have helped me with unfailing patience and courtesy.

PAUL CASSAR

Attard,
Malta

PART I

THE EARLY PERIODS

CHAPTER 1

Paleolithic Age to Roman Period

OUR knowledge of the medical history of Malta before to its cession to the Order of the Knights of St. John of Jerusalem in 1530 is very deficient. A dearth of information is characteristic of Maltese history in general up to the middle of the sixteenth century. For this reason the student who attempts to delve into the past to trace the origin and development of many aspects of our social, political and religious life is very often unable to satisfy his curiosity. Whole centuries of darkness interrupt his vision whether his research concerns such diverse subjects as the study of Maltese legislation prior to the early Middle Ages[1] or of our ecclesiastical history before 1575[2] or the history of education previous to the advent of the Order of St. John.[3] Our ignorance of the early medical history of Malta is, therefore, not an exceptional case; hence it is not surprising that the little that one is able to glean from various scattered sources is marked by many gaps and obscurities.

The earliest evidence of the existence of man in Malta harks back to the Paleolithic Age when Neanderthal man appears on the scene. Unfortunately he has left us no vestiges of his handiwork and we only know him through the discovery at Ghar Dalam of two of his molar teeth. They are a completely formed second upper molar and an incompletely developed third upper molar of the right side from the mouth of an individual, probably a man, of about sixteen or seventeen years of age. The special feature of these teeth is the marked degree of fusion of their roots known as taurodontism—a tendency that has been met with in modern man but only to a very limited extent.[4]

The successors of Neanderthal man belonged to the long-headed race that inhabited the shores of the Mediterranean in the New Stone Age. These people developed an advanced culture as shown by their pottery, tools, buildings and personal ornaments; however, nothing is known about their political, social and religious organisation. They must have formed a numerous community in Malta about 2000 B.C., for the bones of many thousands of them have been found buried in the subterranean temple of Hal Saflieni at Tarxien and in other places.[5]

---

[1] Debono, P., *Sommario della storia della legislazione in Malta*, 1897, p. 6.

[2] Ferres, A., *Descrizione delle chiese di Malta e Gozo*, Malta, 1866, p. 650.

[3] Ferres, A., *op. cit.*, p. 656.

[4] Keith, A., 'Neanderthal man in Malta', *Journal of the Royal Anthropological Institute*, 1924, liv. 251.

Report on the Work of the Museum Department for 1934–35, Malta, 1935, p. xvi.

In this New Stone Age we come across the earliest traces of the handiwork of man that has a medical importance. Among the archeological remains of this period there is a series of statuettes representing diseased parts of the human body. These objects were discovered under the floor of one of the chambers of the temple of Mnaidra. From the nature of these finds it has been inferred that the enclosure in which they were discovered formed an external court to which the sick were brought to be cured by the healing deity.[6]

These statuettes consist of a figure representing the lower half of a naked female body; two models of legs and one of a hand; and two torsos which are by far the most interesting. In one of these trunks an immense tumour projects from the abdomen while posteriorly the body is represented as wasted with very prominent vertebrae and ribs. The iliac regions are hollowed and the general appearance is suggestive of the wasting produced by a chronic illness as might occur in the case of an abdominal new-growth. The other torso presents a similar appearance except that it has a large swelling in the left groin which suggests the presence of a mass of enlarged glands.[7] If the interpretation, given by archeologists, that these objects are votive figures is correct then these neolithic offerings are the precursors of the many 'ex-voto' that to this day are to be found deposited in our churches as tokens of cures obtained through the intervention of divine influence.

The excavation of the Tarxien neolithic temple yielded a baked clay model of a naked female figure with large breasts and prominent abdomen and with clearly marked out ribs and backbone. What makes this statuette particularly interesting are the small bits of white shell stuck in the neck, armpits, the midline of the chest, umbilicus, groins and other parts of the body. The suggestion has been made that this figure was meant to represent some pathological condition[8] but it may also be an instance of the application of one of the most ancient methods of treatment, i.e. that of counter-irritation, the bits of shell indicating the areas of the body where poultices and perhaps leeches or some form of puncture or cautery were applied.

---

[5] Zammit, T., 'The Inhabitants of the Maltese Islands', *Archivum Melitense*, 1913, i. 237.

[6] Caruana, A., Quoted by J. H. Cooke in 'Vestiges of the Phoenicians in the Maltese Islands', *Mediterranean Naturalist*, 1893, iii. 442. Zammit, T., 'Archeological Discoveries in Malta and Gozo during the year ending 31st March 1911', *Archivum Melitense*, 1913, i. 189. Zammit, T., *Malta, the Islands and Their History*, Malta, 1926, p. 53. Ugolini, L. M., 'La preistoria di Malta e quella del bacino del Mediterraneo', *Archivio Storico di Malta*, 1935, vii. 15.

[7] Zammit, T., and Singer, C., 'Neolithic Representations of the Human Form from the Islands of Malta and Gozo', *Journal of the Royal Anthropological Institute*, 1924, liv. 92–97.

[8] Zammit, T., *Prehistoric Malta*, London, 1930, p. 94.

The discovery of intertwined coils of clay in the form of serpents at Mnaidra temple opens up another field for speculation. In fact it appears to point to the existence of snake worship in this sanctuary, an occurrence that would strengthen the assumption that, in that remote period, Mnaidra was regarded as a healing shrine since it is known that the symbol of the intertwined serpent was associated with the medical arts since very ancient times.[9] A stone slab found in the Ggantija temple at Gozo and which probably formed part of an altar also bears in relief the figure of a creature very suggestive of a serpent or eel. Altogether, therefore, we have strong indications of our early ancestors' faith in the healing powers of supernatural agencies and of the close association, still extant in primitive communities, between medical and religious practice when the priest and the healer were one and the same person.

The representations of the deity are also of interest from the medical viewpoint. A number of statuettes of pottery and limestone have been found in Maltese neolithic temples. These figures of divinities are characterised by what has been called steatopygy, i.e. the over-deposition of fat on and behind the thighs and hips. One explanation of this extreme corpulence is that the statuettes represent women with a peculiar fat development like the modern Bushwoman; another theory postulates that they are symbols of fertility in the form of pregnant goddesses;[10] while it has also been observed that the fat distribution is similar to that found in certain pathological states and the question has been raised as to whether the sporadic occurrence of one or two pathological cases might not have been responsible for the association of adiposity with sanctity.[11]

Apart from the anomalies of fat metabolism, neolithic man in Malta was familiar with at least one type of skeletal deformity, i.e. polydactyly, as is shown by a statuette each hand of which has five fingers and a thumb.

The most intriguing construction that neolithic man has left us is the series of underground chambers, known as the Hypogeum of Hal Saflieni, which is believed to have been dug out of the rock about 2000 B.C. Archeologists have come to the conclusion that the Hypogeum was a sanctuary in which 'devotees were able to consult an oracle under the direction of a numerous priesthood who among other things practised oneiromancy, that is they interpreted dreams provoked in the faithful that slept in cubicles'.[12] It is not improbable, however, that the Hypogeum may have served the purpose of a temple-hospital. From studies of primitive societies with a strong belief in the powers of the supernatural it has been proved that primitive man conceives illness and death as being the result of the wrath or malice of supernatural agencies. As a result of this conception he resorts to magical and religious practices to rid himself of the diseases that afflict him. It is, therefore, conceivable that the Hypogeum may have played a prominent part in such practices in neolithic times. Amulets have been found in great numbers in this temple and it is well known that the wearing of such charms and amulets by primitive peoples is one of the means they employ to ward off disease. In this sanctuary, too, the patient after praying and making offerings to the gods may have been drugged or otherwise made to sleep by the priests to have the line of treatment revealed to him in the hypnotic state. Such procedures were used, in times nearer to us, in the temple-hospitals of Aesculapius of ancient Greece.[13] The two clay statuettes found at the Hypogeum and representing a female devotee stretched on a ritual couch suggest such an occasion.[14] It is also probable that faith-healing flourished. The priests may have used incantations or recited magic formulae or performed exorcistic ceremonies to appease the gods and restore the patient to his former state of good health.

---

[9] Bradley, R. N., *Malta and the Mediterranean Race*, London, 1912, p. 265.

[10] Zammit, T., 'Report on the Museum 1915–16', *Malta Government Gazette, Supplement*, 24th November 1916. Zammit, T., *Prehistoric Malta*, London, 1930, p. 13. Peet, T. E., *Rough Stone Monuments and Their Builders*, London, 1912, p. 106.

[11] Zammit, T., and Singer, C., *op. cit.*, p. 78.

[12] Zammit, T., *The Neolithic Hypogeum at Hal Saflieni*, Malta, 1935, p. 58.

Many skeletal remains of neolithic man have been unearthed in Malta and Gozo but they tell us nothing about the diseases that affected him. We do know, however, that he suffered from tooth caries[15] and other dental troubles. A cave at Burmeghez, near Mqabba, has yielded 2,250 teeth belonging to our neolithic inhabitants. An examination of these specimens revealed the presence of fusion and maldevelopment of their roots. These abnormalities were particularly marked in the wisdom molars as is sometimes the case with modern man.[16] There is the possibility, therefore, that the eruption of the wisdom tooth in neolithic times was as troublesome as it can be to-day.

Archeology also furnishes us with evidence of neolithic man's preoccupation with sex and procreation. What his physiological and pathological notions were about the sexual functions, we have no means of knowing but there is no doubt that he attached great significance to them. In fact we find that at that very early period sexual matters had already assumed a mystico-religious meaning. Anatomical representations in stone of the male genital organs and their symbolical equivalents have been discovered in various sites in these islands. An unusual group of three such symbols was in use in the Tarxien temple. This object has a projection at the back which may have served the purpose of a handle as if it were carried about as a sacred object during religious ceremonies. Such emblems may have been connected with fertility rites or with initiation ceremonies culminating in circumcision or with some sacrificial ritual involving emasculation through castration. If these assumptions are correct we are justified in thinking that our neolithic ancestors were familiar with surgical procedures for the removal of the prepuce and of the testicles. Be that as it may, the phallic representations that have survived show that man's concern about the sexual impulse is not the modern phenomenon that many think it is; on the contrary they prove that sex constituted an important problem even at the dawn of civilisation.

---

[13] Pavey, A. E., *The Story of the Growth of Nursing*, London, 1951, p. 60.

[14] They are preserved in the National Museum, Valletta, Malta.

[15] Dr. C. Baldacchino, formerly Director of the National Museum, personal communication of the 4th February 1952.

[16] Keith, A., *op. cit.*, p. 257.

Trepanning of the skull in the living was practised by the neolithic inhabitants of France and Britain[17] as a form of treatment whereby the malignant supernatural powers that were believed to have invaded the patient and caused his illness were released from his body.[18] This operation appears to have been unknown in Malta in those days as, so far, no trephined neolithic skulls have come to light in these islands, although the necessary instruments for carrying it out were available in the form of knives, saws and scrapers of flint, chert and obsidian.[19]

Malta has never derived its importance from its territorial size or from its economic value but only from its position in the centre of the Mediterranean—a circumstance that has made it famous as a halting place and as a springboard in the various human migrations from east to west since the earliest times. At the dawn of written history we find the Phoenicians colonising Malta in the fifteenth century B.C. Later the Carthaginians also settled in the Island but although there are ample proofs of these Punic civilisations, this period forms an impenetrable gap of many hundreds of years in our medical history. The healing god of these Semites was Exmun who was usually represented as holding a staff with a serpent entwined around it.[20] It is known, from an inscription preserved in the National Museum, Valletta, that his cult was not foreign to our ancestors.

The Phoenicians and the Carthaginians have left us clear evidence as to the manner in which they disposed of their dead. Although their burial customs were dictated by religious motives we can find no fault with them from the hygienic point of view for these peoples buried their dead away from inhabited places in tombs cut in the rock and sealed with large stone slabs.[21] In fact they were more advanced in this respect than the medieval inhabitants of Malta who followed the usage, then current in Europe, of burying the dead in their churches.[22]

By the third century B.C., Malta, like the greater part of the Mediterranean basin, had fallen under Greek influence.[23] One of the results of this cultural change was the use of cremation as a means of disposing of the dead. The custom of burning corpses was first introduced in the Island by Copper Age man but while the latter's custom was the consequence of his religious beliefs, the Greek practice of destroying corpses by burning was inspired by sanitary motives. Thus it is related that cremation was adopted by the Athenians as a sanitary measure following the invasion of Athens by plague in 430 B.C.[24] Cinerary urns of classical times still full of ashes have been discovered in sepulchral caves of this period in these Islands together with clay vessels that contained the balsams and other liquids that were poured over the corpse during the cremation.[25]

---

[17] Peet, T. E., *op. cit.*, p. 62.

[18] Guthrie, D., *A History of Medicine*, London, 1947, p. 5.

[19] Bradley, R. N., *op. cit.*, p. 75.

[20] Castiglioni, A., *Storia della medicina*, vol. i, Verona, 1948, p. 110.

[21] Caruana, A. A., *Ancient Pagan Tombs and Christian Cemeteries in the Islands of Malta*, Malta, 1898, p. 7.

[22] *Il Barth*, 6th August 1872, p. 171.

[23] Laferla, A. V., *The Story of Man in Malta*, vol. i, Malta, 1939, p. 18.

The Romans came next in 242 B.C. and stayed for over one thousand years. Though their occupation of the Island was mainly a military one a few vestiges of medical interest belonging to this period have come down to us. The archeological remains of private and public baths or thermae that are to be found in various parts of the Maltese Islands testify to the high standards of personal and domestic hygiene that prevailed in Roman Malta. Ruins of these buildings have been discovered at Mdina, Marsa, Kordin and Dingli. They were built of marble with richly decorated pavements of mosaic and were fed by a constant supply of water which was conveyed through underground lead pipes from nearby springs.[26] Some of the houses, such as the 'Roman Villa' at Rabat, and the buildings at Ramla Bay (Gozo) and Ghajn Tuffieha were also supplied with hot water in winter from a '*calidarium*' placed at some distance from the house.[27]

Among the ruins of the Roman thermae of Ghajn Tuffieha there is a room containing a number of privies.[28] This room was ten feet square and along three of its walls was ranged a sort of stone bench, one foot high, made of vertical and horizontal slabs. The upper surface of the bench had nine circular holes cut in it at a distance of about two feet from one another to serve as closet seats. A very striking characteristic of these seats, from the sanitary point of view, is the small rectangular notch cut in their thickness in front which prevented contact of the male genital organ with the seat—a feature of our modern U-shaped lavatory seat. It is also noteworthy that the stone slabs containing the seat were moveable, an arrangement that readily permitted inspection and cleaning of the underlying space and the introduction of dry earth to cover the excreta.

Some skeletal remains found in tombs of this period furnish us with a few items of pathological nature. An examination of these bones, preserved in our Museum, resulted in the following findings: (a) a well-known anatomical variation of the sacrum was evident in a beautifully

[24] Caruana, A. A., *Report on the Phoenician and Roman Antiquities in the Group of the Islands of Malta*, Malta, 1882, p. 102.

[25] *Ibid.*, p. 102.

[26] *Ibid.*, p. 62.

[27] Zammit, T., 'The Roman Villa Museum at Rabat', *Archivum Melitense*, 1918, iii. 241. *Report on the Work of the Museum Department for 1931–32*, Malta, p. v.

[28] Zammit, T., 'Roman Villa and Thermae at Ghain Tuffieha, Malta', *Bulletin of the Museum*, Malta, 1931, i. 62.

preserved specimen in which the left transverse process of the first sacral segment was not fused with the rest of the bone on the same side; (b) two lumbar vertebrae found in another Roman grave showed marked lipping round the upper and lower margins of their bodies; (c) in two skulls, discovered in separate localities, there was evidence of a healed lesion involving nearly the whole thickness of the bone but sparing the internal surface. In each case the frontal bone was involved and the lesion formed a shallow conical depression the greatest diameter of which was about half an inch.[29]

In ancient days Malta was renowned for a breed of toy-terriers known as Maltese dogs. In Roman times this dog came into prominence for its alleged therapeutic virtues. According to Caius Plinius Secundus these animals were applied over the epigastric region in patients with stomach complaints to relieve the sufferers of their pains. It was believed that, through this contact with the animal, the malady passed from the patient to the dog which often sickened and died.[30]

The discovery of clay feeding bottles[31] provided with a tapering spout below the neck and with a handle shows that the administration of nourishment to invalids and babies was a matter of solicitude to the inhabitants of our islands in Semitic and Roman days. An earthenware vessel identical in shape with the present-day male urinal shows clearly that they had tackled the problem of nursing wet patients on much the same lines employed by us to-day.[32]

To the Roman period belongs the first written document that throws some light on the presence of disease in Malta though the document is not so informative as one would wish it to be. Paul of Tarsus and his companions were shipwrecked on the Island in A.D. 60. We read in Luke's Acts of the Apostles (XXVIII, 8) that one of the miracles wrought by Paul in Malta was the healing of the father of Publius who lay 'sick of a fever and of a bloody flux'. Publius was the delegate of the Praetor of Sicily appointed to govern these islands.[33] According to one tradition the cure of Publius' father took place in the Praetor's palace which is alleged to have stood upon the site which the Cathedral of Mdina now occupies. Another version has it that the patient was healed while living in his country house near Wardija Hill where a church was subsequently erected and dedicated to St. Paul.[34] There were other persons afflicted with illness at that time for we read further on in the same Acts that 'all that had diseases in the Island came and were healed' by Paul. We have not, however, been told the nature of their diseases.

---

[29] I am greatly indebted to the Director of the Museum, Capt. Charles Zammit, for allowing me to examine the bones.

[30] *Historia Naturalis*, Lib. XXX.

[31] Caruana, A. A., *Ancient pottery from Ancient Pagan Tombs and Christian Cemeteries in the Islands of Malta*, Malta, 1899, p. 33. Zammit, T., 'The Maltese Rock Cut Tombs of a Late Pre-Christian Type', *Bulletin of the Museum*, Malta, 1931, i. 107. *Museum Report for 1907–08*, Malta, p. 3.

[32] Caruana, A. A., *op. cit.*, p. 29, fig. 23.

[33] Galea, J., 'A Chronological Series of the Bishops of Malta', *Scientia*, 1944, x. 100.

[34] Ferres, A., *Descrizione delle chiese di Malta e Gozo*, Malta, 1866, p. 344.

As a document dealing with the medical state of Malta in A.D. 60 the Acts could have been more informative, especially when one considers that it was written by a medical man. Unfortunately Luke himself is a very shadowy figure as a physician. He seems to have been so self-effacing that were it not for Paul we would not have known that he was a physician at all. Indeed we learn about Luke's profession from a chance remark of Paul who alludes to his companion as 'the most dear physician'.[35] Little else is known about the writer of the earliest document bearing on Maltese medical history—a document which, in spite of the many questions that it raises and leaves unanswered, is still of the utmost importance to the medical historian for it tells us the name of the first known foreign physician to set foot on our Island; it records the identity of the earliest patient known to us; and finally it gives us the oldest indication of the existence of 'dysentery' in Malta.

A faint glimmer of light illumines momentarily the darkness of the remaining years of the Roman period. It has been stated, although without adequate proof, that one of the early bishops of Malta was a physician.[36] His name is given as Don Pietro and he is alleged to have lived about A.D. 200. Nothing else is known about him apart from the fact that he was consecrated bishop by Pope Victor I and that he died in Valencia some years later. Modern historical research has shed no new light upon this personage; rather it throws a serious doubt upon his existence.[37]

---

[35] *Epistle to the Colossians*, IV, 14.

[36] *Cronologia dei vescovi di Malta dall'anno 57 fino al 1857*, Miscellanea 397, Royal Malta Library, Valletta.

[37] Galea, J., *op. cit.*, p. 100.

CHAPTER 2

The Middle Ages

After the Roman period the centuries unfold themselves without giving up their secrets until we reach the ninth century, just before the end of the Byzantine Empire and the beginning of the Arab period in Malta. A marble tombstone bearing a Greek inscription records the death of a physician called Domesticus. The inscription reads: 'Here lies Domesticus, Christian and doctor. He lived for 73 years and died in this place a day before the Kalends of February in the year 810' (29th January). Since the tablet was found at Rabat on the site on which the Oratory of St. Joseph now stands (adjacent to the church of the Minor Observants), we may presume that Domesticus lived in the Rabat area.[1]

In A.D. 870 the Islands passed to the Arabs who, in spite of a domination of over two centuries, left no trace of their achievements in the arts and sciences as they did in Spain and Sicily. After their expulsion from Malta in 1099 by Count Roger the Norman there followed a connection with Sicily of nearly four hundred years but we do not come across any items of medical interest until we advance into the thirteenth century. A legal document of this period, dated 12th April 1283, records the residence in Malta of a Florentine physician, a certain Magister Jacobus Finus, but we learn nothing of his medical activities. Indeed we happen to know of his existence only because of his involvement in the sequel of a murder case. A judge was killed during a quarrel in Malta and several persons living here unjustly took possession of the books and other belongings of the deceased. Among these men we find Magister Jacobus who, together with the others, was compelled by royal decree of the Sicilian King to restore the property of the murdered judge to his father in Messina.[2]

Just as scanty is the information to be gleaned from evidence, this time of an archeological kind, furnished by the Island of Gozo. A very ancient cemetery, of which only traces now remain, existed near the convent of the Friars of St. Augustine of Victoria, Gozo. In this cemetery were buried many illustrious persons among whom several nobles and high ecclesiastical dignitaries. Its establishment has been ascribed to the thirteenth century and though no records are extant as to its origin some historians, backed by traditional belief, maintain that this burial ground contained the corpses of the followers of King Louis IX of France who died of plague while they were engaged in the African crusade against Tunis in 1270.[3] If reliance is placed on this tradition then the year 1270 marks the earliest known association of pestilence with the history of these islands.

---

[1] Ferres, A., *Storia ecclesiastica di Malta*, Malta, 1877, p. 60. Caruana, A. A., *Report on the Phoenician and Roman Antiquities in the Group of the Islands of Malta*, Malta, 1882, p. 156. Caruana, A. A., *Ancient Pagan Tombs and Christian Cemeteries of the Islands of Malta*, Malta, 1899, p. 19. Here the age of Domesticus is given as 55 years and his date of death as 30th August 810.

[2] Galea, J., 'Documenti per servire alla storia medievale maltese', *Melita Historica*, 1958, ii. 199.

Plague visited the Island for the second time in 1348.[4] This epidemic originated in Central Asia and spread to Europe advancing through France, England, Germany and Italy whence it reached Malta. It has come down in history as the Black Death and is estimated to have carried away about a quarter of the world's population.

The fourteenth century witnessed the small beginnings of Saint Francis's Hospital at Rabat. This Hospital, now known as Santo Spirito (Holy Ghost), can boast of an unbroken history of at least six hundred years and is therefore one of the oldest hospitals still in existence in Europe. Although its foundation year is lost in the mist of time, there is documentary proof that the hospital had already been set up in 1347. Its history is fully considered in another chapter of this book.

The fifteenth century is the darkest period in our political and social history owing to the exactions of the feudal lords and the frequent depredations by Barbary corsairs which reduced the Island to great unhappiness. This century, however, is no less remarkable for medical events. Since the reign of King Martin I of Sicily in 1397 Malta and Gozo were granted a form of elected local government known as '*universitas*' or Popular Council. Though not a legislative body this municipality had, among other privileges, the power of levying taxes, appointing officials and providing corn for the inhabitants.[5] By the beginning of the fifteenth century we find that this municipality was also charged with the promotion of hygiene and the safeguarding of the public health.[6] That this council was alive to its duties is shown by a petition addressed to King Martin II of Aragon in 1409 in which the citizens of Mdina begged to be allowed to construct an opening or outlet in the city bastions through which they could dispose of the waste material of the city that was causing them great nuisance and inconvenience.[7] It seems that this request was granted, for many years afterwards, in 1476, a proclamation of the 2nd September issued by the jurats of Mdina enjoined the disposal

---

[3] Caruana, A. A., *Report on the Phoenician and Roman Antiquities* etc., p. 111.

[4] Borg, T., *Malta u l-gwaj tal pesta*, Malta, n.d., p. 1.

[5] Zammit, T., *Malta, the Islands and their History*, Malta, 1926, p. 99.

[6] Valentini, R., 'Organizzazione municipale e classi sociali in Malta', *Archivio storico di Malta*, 1936, viii. 142.

[7] *La Diocesi*, 1918, ii. 243.

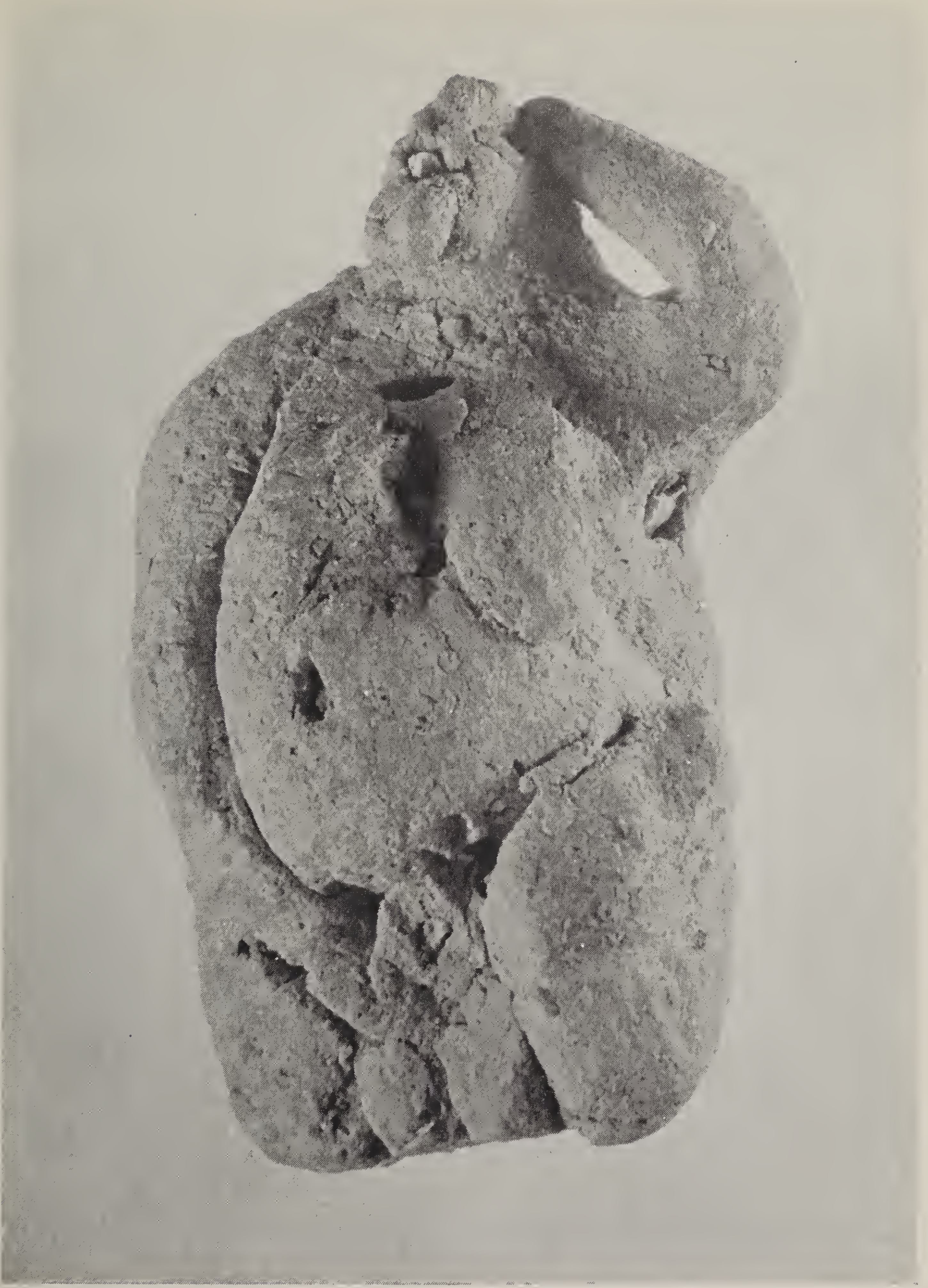


Plate I

Clay statuette from the Tarxien neolithic temple showing bits of white shell stuck in the neck, armpits, the midline of the chest, umbilicus and groins. The bits of shell may be meant to indicate the sites of some pathological condition or of the application of some form of counter irritation.

By courtesy of the Director of the National Museum, Valletta

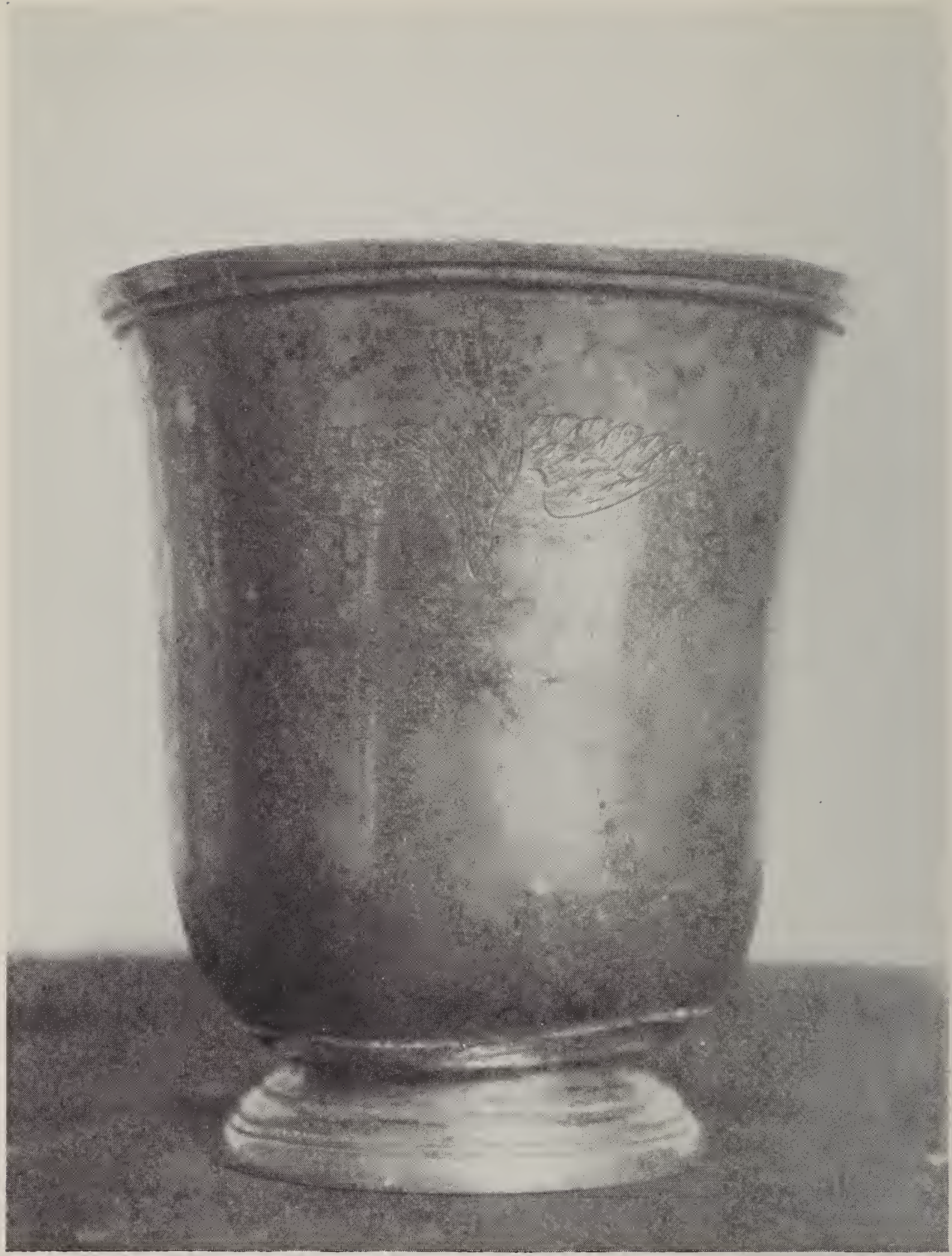


Plate II

Silver cup previously in use at Santo Spirito Hospital (Hospital of the Holy Ghost) at Rabat, Malta. Note the dove, symbol of the Holy Ghost, engraved at the top.

By courtesy of the Director of the National Museum, Valletta

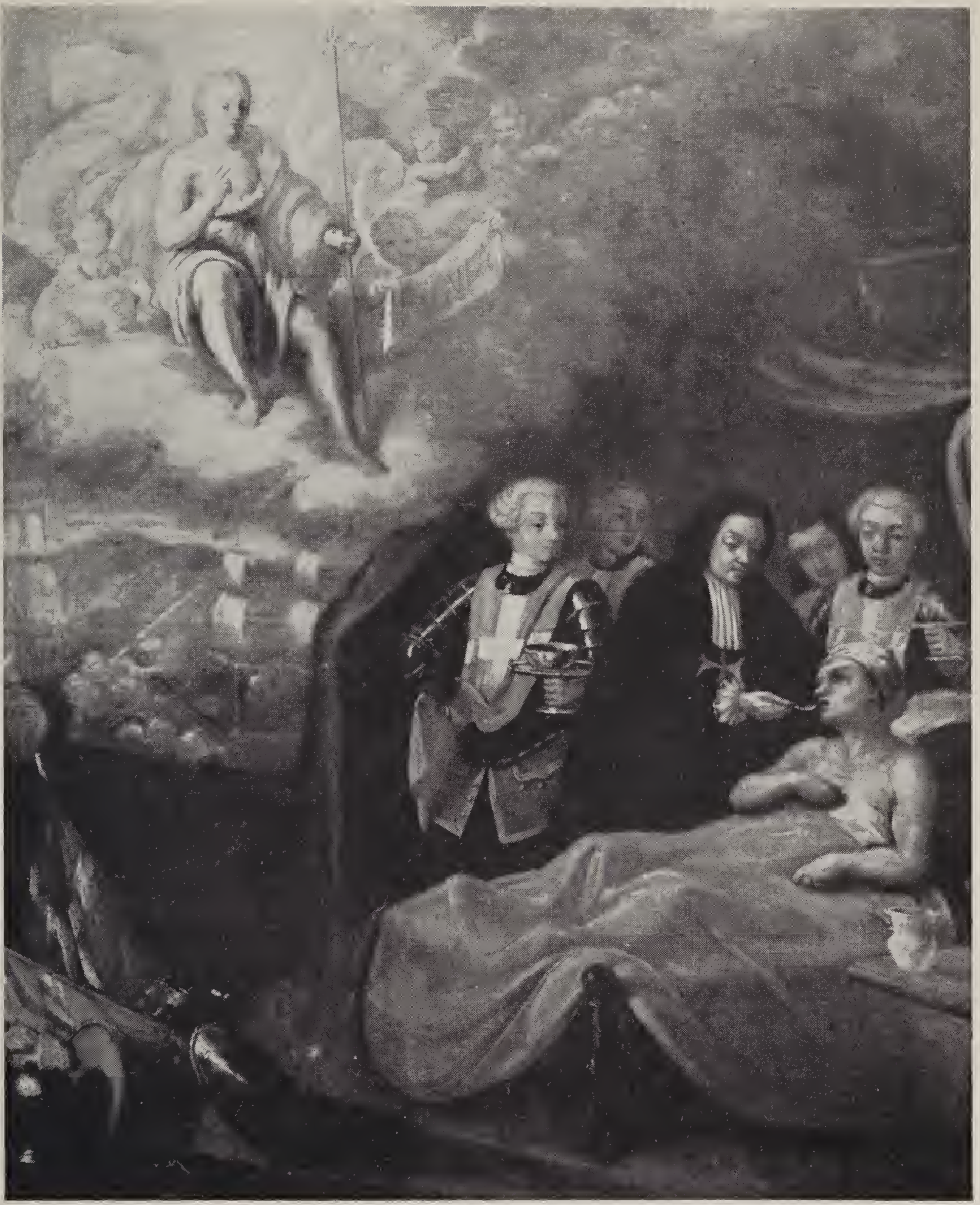


Plate III

The Grandmaster in black robe, surrounded by his knights, nursing the sick. From an 18th century panel in oils.

By courtesy of the Director of the National Museum, Valletta

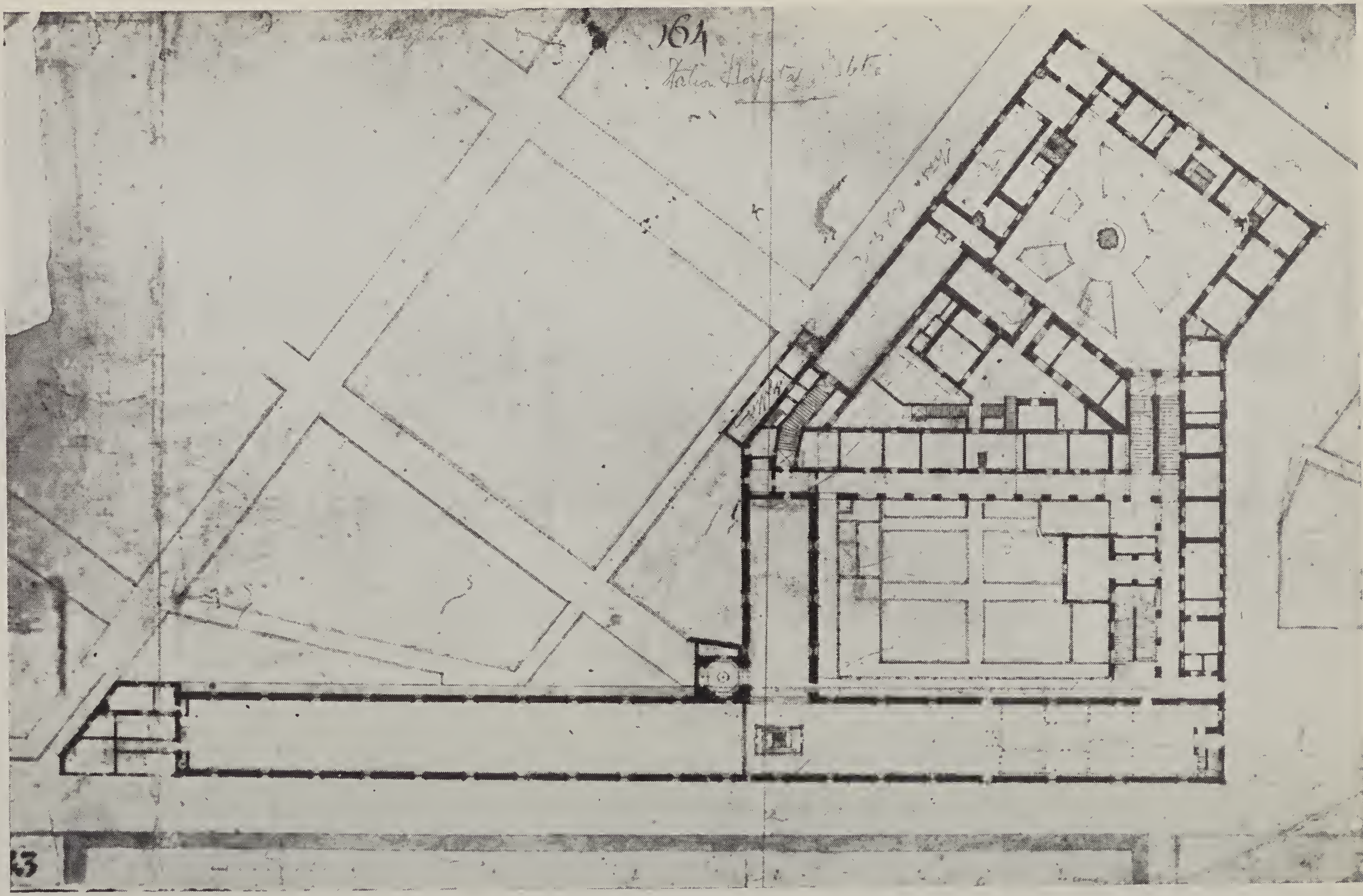


Plate IV

Ground plan of the Holy Infirmary as it appeared at the beginning of the last century.

The original is at the Royal Malta Library, Valletta of refuse through 'the usual channel' and prohibited its conveyance through the Greeks' Gate of the city. The penalty for disregarding this order was a fine or the infliction of one hundred lashes if the culprit was a slave. Similar injunctions are contained in an earlier decree dated the 20th September 1472.

On the '*universitas*' or municipality devolved also the safeguarding of the public water supply. A '*bando*' or proclamation of 1472 prohibited the washing of clothes, vegetables and other articles in the fountains of Saqqajja and Gherixiem near Mdina under penalty of a fine or of fifty lashes if the offender happened to be a servant. An order of the same tenor but contemplating heavier punishments was proclaimed in 1476.[8]

The municipality employed a pharmacist, a certain Salvatus, and also a physician, Abraham the Jew, to minister to the needs of its citizens. Salvatus is thus the first pharmacist and Abraham the first government medical officer known to us.[9] These medical men must have been kept quite busy by an outbreak of plague in 1427–28,[10] and also by an epidemic of '*morbu di la gula et di la punta*' which occurred in 1453 and lasted until November 1455 by which time it had carried off seven hundred men. The description of this disease as 'sore throat with a rash' identifies it with scarlet fever. The mortality caused by this epidemic together with the carrying off into slavery of many inhabitants during piratical raids brought about such a serious depletion in the population of the Island and the municipality became so gravely alarmed that a petition was sent to the King of Aragon to exempt them from the tribute of providing the crew of one of his galleys as such a measure would have resulted in rendering the Island 'totally uninhabited'.[11]

Three hospitals—all of which have now disappeared—were founded in this century. One of them, Saint Peter, was reserved exclusively for women and was erected inside the city of Mdina. No records have survived concerning its origin and progress but it is known that it ceased to function as a hospital in 1418 when it was converted into a monastery for the nuns of the Order of Saint Benedict. The monastery retained the name of Saint Peter and the edifice, as restored in 1625, still stands on the original site occupied by the hospital.[12]

In the same year that Saint Peter's Hospital came to an end (1418), a bequest for the foundation of a second hospital was left by a noble lady, Margaret of Aragon, who was the daughter of William, natural son of King Frederick III of Sicily, and wife of the Governor of Mdina, Giacomo di Pellegrino.[13] The third hospital was that of Saint Julian in

[8] Leopardi, E. R., 'Bandi of the XV Century', *Melita Historica*, 1957, ii. 126; 1958, ii. 191 and 194.

[9] *Archivio Storico di Malta*, 1936, viii. 149.

[10] Zammit, T., *op. cit.*, p. 98.

[11] *Archivio Storico di Malta*, 1957, ix. 105.

[12] Ferres, A., *op. cit.*, p. 145.

[13] Caruana dei Conti Gatto, V., *Malta nobile illustrata*, Malta, 1903, p. 63.

Gozo founded in 1454. An account of its progress through the succeeding four centuries is given elsewhere in this book.

In the fifteenth century the Jews formed an important element of the Maltese community. They were mainly engaged in commerce but a number of them were also practising physicians. Indeed they appear to have monopolised this profession so that it became 'inconceivable to the government (of Mdina) that any Christian could act in the capacity of physician'.[14] This is understandable as at the time education was at a very low ebb in Malta. The nobles and the rich were proud of their illiteracy and of their inability to write even their own name.[15] The earliest evidence we possess of the presence of a community of Jews in Malta goes back to Roman times as shown by the existence of a series of catacombs at Rabat bearing the characteristic Jewish symbol of the seven-branched candelabrum.[16] Written records about Jews, however, appear only in 1240 when their number in the Maltese Islands was about two hundred and fifty. So frequent were contacts between the members of the Maltese and of the Sicilian Jewish communities that the Jews of the two Islands were reckoned as constituting one single community; but each of these two groups had its own separate administrative and religious organisation. The first mention of a Maltese Jew who was authorised to practise medicine in the Kingdom of Sicily is that of a certain 'Leone Maltese' of Polizzi. He had passed his examinations at Randazzo on the 1st September 1398, one of his examiners being a Spanish Jewish doctor called Joseph Abenazia who was physician to the King.[17] Leone had such a successful career that a few years after qualifying as doctor he too was appointed a royal physician.

In 1413 'Simon Maltese', also of Polizzi and believed to be the son of Leone, received his licence to practise medicine at Palermo. In this city also 'Benedetto da Malta' obtained his medical licence following an examination by the physician-in-chief in 1445. Another Maltese doctor practising in Sicily was Lia Sabbat. We hear of him in 1484 asking to be granted the same exemptions from taxation that were accorded to other physicians at Catania.

The earliest known Jewish physician to practise in Malta was Braccone Safaradi of Gozo who had made quite a reputation by 1446. Another member of the same family was Abraham Safaradi also from Gozo who was employed by the municipality of Mdina. In 1474 Abraham Safaradi had to leave the Island in connection with a private suit, probably in Sicily. No substitute seems to have been appointed in his place and his absence from Malta caused so much consternation among the citizens of

---

[14] Roth, C., *The Jews of Malta*, London, 1931, p. 196.

[15] Mifsud, A., 'Tracce dell'antica vitalità giudaica maltese', *Archivum Melitense*, n.d., iv. 10.

[16] *Report on the work of the Museum Department for 1948–49*, Malta, 1950, p. iv.

[17] Lagumina, B. G., *Codice diplomatico dei giudei in Sicilia*, 1844, vol. i, p. 71.

Mdina that they petitioned the Viceroy of Sicily to compel him to return to Malta and resume his duties without delay.

Abraham Saba was another Jewish physician working in Malta at the time while Xema (or Zemah) Girbi was their contemporary surgeon. The separation between the practice of medicine and of surgery was in accordance with the usage of the times, the distinction having already become established as early as the second or first thousand years before Christ, as shown by the code of Hammurabi. For a very long time surgery continued to be regarded as a craft carried out mostly by barbers, in contra-distinction to medicine which formed the subject of academic studies. Xema Girbi is described as having been efficient and experienced in his craft and very popular with the citizens of Mdina.[18] He had so many patients under his care that when he was elected President of the Jewish community in 1486 the citizens of Mdina procured his exemption from this office so that no extraneous duties would interfere with his professional work.

It is not possible to ascertain where these Jewish doctors of Malta pursued their studies and what kind of curriculum they followed. However, some evidence is available about the medical knowledge of Sicilian and Italian Jews of the Middle Ages and from this we can infer what sort of medical education our Jewish physicians might have received. The fact that they belonged to the Jewish race and religion had a considerable influence on the way they managed their patients, especially those who suffered from contagious diseases. The Jews were very particular about sanitation; so much so that Moses has been called the first medical officer of health and the books of Leviticus and Deuteronomy the first textbooks of preventive medicine. The Jewish physicians of Malta who often occupied the post of Rabbi were certainly well versed in these books of the Old Testament and presumably they must have exercised particular care in the case of infectious patients and with regard to the disposal of their clothing and to house disinfection.

It is certain that the Jewish physicians of Malta did not pursue their studies in the Maltese Islands for no opportunities for organised medical teaching existed in Malta prior to the sixteenth century. It is probable that they studied in Sicily where they had established their own schools and hospitals. On the 17th January 1466 they obtained the concession from the King of Sicily to found a University of studies with the faculty of granting academical degrees.[19] But even before this date a number of Jewish physicians had succeeded in obtaining the licence to practise medicine and surgery in the kingdom of Sicily after an examination by the Royal physician. We know of over one hundred and thirty Jews in Sicily who qualified as physicians and surgeons between 1363 and 1466. Among them are the Maltese Jews already mentioned.[20]

[18] Lagumina, B. G., *Codice diplomatico dei giudei in Sicilia,* 1844, vol. ii, p. 398.

[19] *Ibid.*, vol. i, Document 491.

[20] *Ibid.*, vol. i, p. 330.

In medieval Jewish life the practice of medicine was frequently combined with the performance of certain religious duties. Thus the Rabbi who was the spiritual head of the Jewish community was very often a physician. Hence we find the physician Braccone Safaradi of Gozo acting as deputy of the Chief Rabbi of Malta in 1446. Abraham Safaradi was Rabbi in 1485 and as such he was given preference over any other Jew in the Maltese Islands in matters pertaining to medical practice and the interpretation of the Jewish law.[21] In later years another important and more lucrative office was added to that of the Rabbinate. This was the post of notary of the Jews. The person filling this post had to possess a good knowledge of Jewish law. As this qualification was possessed by the Rabbi it is not surprising that sometimes the latter was made to assume also the office of notary. Such a combination prevailed in Malta in 1492 when the physicians Abraham Saba and Abraham Safaradi were appointed notaries[22] so that towards the end of the fifteenth century the physician in Malta was an adept not only in the art of medicine but also in Jewish religion and law.

We can now build up a picture of the daily life of the Maltese-Jewish doctor in the Middle Ages. He lived at Mdina which was then the capital city of the Island. As Rabbi he had to attend the synagogue where his devotions would occasionally be disturbed by the rabble of the city who did not scruple to break the doors, smash the lamp of the synagogue and even throw stones at the congregation.[23] Every now and then he had the sad duty of accompanying the remains of one of his co-religionists to the Jewish cemetery which was outside the bastions of Mdina. More often he would be called to visit the sick in Mdina and Rabat and in other parts of the Island as well. After his rounds he had his notarial duties to attend to when members of the Jewish community would call on him to draw up contracts and to seek legal advice on matters pertaining to business and family affairs.

While on the continent of Europe the relationship between Jew and Christian was not always a happy one, in Malta the Jews were relatively well treated except for some restrictions imposed upon them towards the close of the fifteenth century. The Jewish doctors were respected more than their co-religionists who were engaged in commerce. The surgeon Xema was particularly liked by the citizens of Mdina.[24] However, in spite of this deference shown to them, the Jewish doctors, like other members of their race, were compelled to wear the badge prescribed by the Lateran Council of 1215 and enforced by the Emperor Frederick II in 1221. This badge consisted of a wheel-shaped piece of red cloth and special custodians were appointed to see that this regulation was obeyed.

The feelings of hostility towards the Jews which on the continent had been mounting gradually during the fifteenth century reached their climax in 1492 when the edict ordering their expulsion from the Kingdom of Sicily was proclaimed. This edict applied also to Malta and Gozo as these islands formed part of the Kingdom of Sicily at the time. The Jews accordingly left Malta and Gozo in the following year and their property was bought by the municipality of Mdina. By the first half of the sixteenth century they were back in Malta but only as slaves in the possession of the Order of Saint John of Jerusalem.[25] Among these slaves there was an Italian Jew—Sabbato by name—who was a physician. He was freed from slavery in 1574 but before his departure from Malta he had for seven years served the knights and the people with 'all diligence and faith' and treated 'all those who went to him with attention and solicitude and in a good and praiseworthy manner'.[26]

---

[21] Lagumina, B. G., *Codice diplomatico dei giudei in Sicilia, 1844,* vol. ii, p. 358.

[22] *Ibid.*, vol. ii, p. 566.

[23] *Ibid.*, vol. ii, p. 569.

[24] *Ibid.*, vol. ii, p. 398.

In the seventeenth century the surveillance of the Jews in Malta was exercised by the Inquisitor and among the restrictions imposed upon them by the synodal ordinations of 1647 was the prohibition against the practice of medicine. Christians were not allowed to seek treatment at the hands of Jews or to make use of drugs acquired from Jews under penalty of excommunication; while those Jews who transgressed these laws were punished by the infliction of a public whipping.[27]

The first recorded physician of undoubted Maltese origin is Dr. Joseph Callus or Callusius according to his Latinised signature. As a medical man his story is only known to us in bare outline for he has come down in history more as an adventurer and, in the end, as a national hero than as a physician. His character has remained so elusive that up to very recent times even his name was a matter of controversy. In fact he is traditionally known as Matthew Callus but it has now been established that his real name was Joseph.[28] He was born at Zurrieq at the beginning of the sixteenth century, probably between 1500 and 1510. It seems that at first he meant to join the priesthood but when he had already reached the stage of cleric he changed his mind and began studying medicine instead. We do not know where he studied or when he qualified though we may not be far wrong in supposing that he pursued his medical education in Sicily. In fact during this period Maltese young men who wished to join a profession usually went to Sicily for their studies; it was only from the sixteenth century onwards that they began to frequent also the schools of Naples for jurisprudence and medicine and of Rome for theology.[29]

In 1530 we hear of Callus practising in Syracuse where he had made a name for himself. At this time the Order of St. John of Jerusalem with Grandmaster L'Isle Adam at its head was in Syracuse making preparations for its embarkation to Malta. Callus appears to have joined the medical service of the Order at this juncture while he was still in Sicily. Confirmatory evidence is afforded by the fact that when the Order eventually arrived in Malta Callus was in its employment as a naval physician on board the *Sant'Anna* which was the largest ship in the Order's navy. While serving on this vessel he saw active service during the expedition against Tunis in 1535. About this year he was appointed physician of Mdina by the municipality of that city. He filled the post 'loyally with every diligence' and the Grandmaster himself qualified him as a very wise and faithful servant. He is the first physician we meet to bear the title of 'doctor', his Jewish predecessors in the medical line having been called 'master'. He was also addressed as 'magnificus' a title that in those days was given to persons of high social standing. From this time onwards we lose sight of him and when we next hear of him it is in connection with his activities as a treasure hunter. The belief was then current that valuable treasures and large sums of money had been hidden in several parts of Malta by the Arabs, and subsequently by the Jews, before they left the Island.[30] Attempts at the recovery of these treasures had been made as early as 1461 while one of the first petitions presented to Grandmaster L'Isle Adam was a request to search for hidden treasures by the commercial firm Luca d'Armenia and Antonio Callus.[31] Dr. Callus submitted his first petition to excavate in 1537 but this request does not appear to have been granted. He made a further attempt in 1558 when he petitioned Grandmaster la Vallette who granted his request and issued the decree authorising Callus to begin operations. It is not known whether Callus carried his project into effect but we do know that a few months later he had fallen into disgrace with the Grandmaster. The trouble arose in connection with a private suit which Callus instituted against a second party for the recovery of the price of a schooner. In order to understand why such private litigation should have involved Callus in a clash with the Grandmaster, it must be remembered that in the sixteenth century the administration of justice was modelled differently from the present. In those days there were two Law Courts in Malta, the Order's and the Bishop's. Ecclesiastics and those who had received the first tonsure fell under the jurisdiction of the Episcopal Court both in civil and in criminal matters.[32] Callus, being a cleric, thought that the proper procedure for him was to file his suit in the Bishop's Court. Grandmaster la Vallette, however, thought otherwise. He felt offended by Callus' action because he considered that as Callus was a government employee he should have had recourse to the Order's Court for the settlement of his suit and he interpreted Callus' approach to the Episcopal Court as an attempt to circumvent the authority of the Order. As a result the Grandmaster punished Callus by removing him from his post of physician to the city of Mdina and his salary was stopped in August 1558.

---

[25] Archives 430, fol. 256t; Archives 432, fols. 233 & 256, Royal Malta Library.

[26] Archives 435, fol. 245t, Royal Malta Library.

[27] Mifsud, A., *op. cit.*, pp. 18 and 20.

[28] Zarb, S., 'Matthew Callus', *Scientia*, 1945, xi. 50. Galea, J., 'Matthew Callus. A Myth?', *Scientia*, 1945, xi. 63. Gatt, J., 'It-tabib Callus', *Birgu*, February 5th to 21st, 1945.

[29] Ferres, A., *op. cit.*, p. 144.

---

[30] Farrugia, G., *Ghawdex bil grajja tieghu*, Malta, 1936, p. 75.

[31] Valentini, R., 'I Cavalieri di San Giovanni da Rodi a Malta', *Archivum Melitense*, 1935, ix. 41. Farrugia, G., *op. cit.*, p. 75.

[32] Debono, P., *Sommario della storia della legislazione in Malta*, Malta, 1897, p. 338.

Though deprived of his official position, Callus did not cease to look after his patients both in Mdina and in other parts of the Island. He continued to visit the sick even when he himself was feeling ill and had to be carried from house to house. In March 1560 he submitted a petition to the Grandmaster in which he apologised for his unintentional mistake. He eventually withdrew his suit from the Bishop's Court and filed it in the Order's Court of Law. He asked to be reinstated in his former post and to be accorded his salary from the date of his suspension from office. His request was granted in March 1560.

Callus was not, however, destined to enjoy his regained position for very long. He soon got into trouble again with the Grandmaster, this time about a more serious issue. The real cause of this second clash is not known with certainty because the archives of the Law Courts of Mdina, where he was eventually tried and where the records of his trial were kept, were burnt in 1798 during the French occupation of Malta; but from a document written by the Bishop's Vicar and addressed to the Inquisitor in 1575, it is evident that the reason for Callus' downfall was of a political nature.

In those times the political lot of the Maltese was not a happy one. When the Knights of St. John took possession of the Island in 1530 the Grandmaster solemnly swore that he would respect the liberties of the municipality of Mdina but very soon after the privileges of the Maltese were ignored. La Vallette was notorious in this respect. In 1560 after further reducing the rights of the municipality and taking the imposition of taxes into his own hands he ordered the same municipality to make an annual contribution of money to the Order's treasury.[33] Although the people resented this new encroachment on their rights their complaints were not voiced by the municipality because this body did not dare oppose the will of the Grandmaster.[34] A number of citizens, however, who were discontented with this state of affairs met secretly and drew up a petition addressed to Philip II King of Spain, in which they appealed to him to induce the Order to respect their rights and privileges. Among these men was Dr. Callus who is alleged to have been the author of the document meant for the king and to have been responsible for its transmission to Spain. The document, however, never reached the king for it fell into the hands of the Grandmaster. Callus was arrested with his collaborators in September 1560. He was tried and condemned to death as a traitor. He was hanged, probably at Saqqajja (Rabat), in 1561.

---

[33] Zammit, T., *op. cit.*, p. 153.

[34] Vassallo, G. A., *Storia di Malta*, Malta, 1854, p. 462.

PART II

HOSPITALS

CHAPTER 3

Santo Spirito Hospital

THE hospital of Santo Spirito (Holy Ghost) at Rabat was the first hospital to be established in Malta. Its situation at Rabat, near Mdina, is not accidental. In the Middle Ages Mdina, as the only city on the Island, was the seat of the civil and military administration and of the ecclesiastical authorities. It was, moreover, the sole fortified citadel affording shelter to the inhabitants of the whole Island during the frequent piratical raids. With the increase of population the city became overcrowded and the merchants, artisans and religious orders started to settle down in its vicinity thus giving rise to the near-by suburb of Rabat.[1] This demographic feature determined the site of the hospital which remained the only main one in the Island until the Knights of St. John built their first infirmary at Birgu in 1532.

Its origin is intimately connected with the adjacent foundation of the Franciscan Convent of the Minor Conventuals. According to a very old tradition this convent with its church was founded in 1220 by St. Francis of Assisi himself, who is believed to have come to Malta to visit the grotto where St. Paul is alleged to have lived during his stay in the Island in A.D. 60, and which is not far from the convent in question.[2] However, no records are extant to support this tradition and there is no evidence that St. Francis ever came to Malta.

Though the foundation dates of the convent and of the hospital are unknown, it is surmised that the convent was in existence round about the year 1300[3] while other authorities ascribe its foundation to the year 1310.[4]

The hospital's beginnings are shrouded in mystery and only fragmentary records survive about its early days.[5] According to an old document, a Palermitan Minor Conventual, named Fra Nicolò Papalla,[6] was appointed procurator of the hospital of St. Francis '*juxta ecclesiam S. Francisci situm*' in 1347.[7] This nomination must have been of a temporary nature for the next record about the hospital that we know of refers to the appointment, this time for life, of the same Papalla as Rector or Governor of the institution. This bull was issued on the 4th December 1370 by King Frederick III of Sicily.[8] From these two documents it is apparent that the hospital was originally named after St. Francis, like the neighbouring church and convent, and also that it enjoyed the royal patronage of Kings of Sicily to whose domains Malta belonged at that time.[9] It is not known how and when the title of the hospital was changed to that of Santo Spirito.[10] According to one authority the institution was still known as St. Francis' Hospital in 1506,[11] but there is no doubt that it had acquired its new name by 1570 since we find it referred to by its present title in Bishop Fra Martino Royas' description of his apostolic visit of that year.

---

[1] Valentini, R., 'Organizzazione municipale e classi sociali in Malta alla fine del secolo XIV', *Archivio Storico di Malta*, 1936, viii. 134.

[2] *Tifkira tal Inkurunazzjoni tal Madonna tas-Sahha*, Malta, 1949, p. 74.

[3] *Ibid.*, p. 5.

[4] Ferres, A., *Descrizione storica delle chiese di Malta*, 1866, p. 113.

[5] *Visitatio Cannaves, 1714*. No pagination. Manuscript in the Archiepiscopal Archives, Valletta, Malta.

[6] Fiorini, B., 'Franciscan Bishops of Malta', *Scientia*, 1945, xi. 21. Mifsud, A., 'Tracce dell'antica vitalita giudaica maltese', *Archivum Melitense*, n.d., iv. 6.

It has been stated that the Minor Conventuals continued to hold the rectorship of the hospital until 1506 when, having abandoned their convent and the hospital in consequence of a pestilence that occurred in that year, they lost the governorship of the hospital and other privileges.[12] It is, however, no longer possible to accept this view in the light of a document of 1433 which shows beyond doubt that the administration of the hospital was in that year entrusted to the Jurats of the University of Mdina.[13] Abuses had occurred in the management of the properties possessed by the hospital. In those days Malta formed part of the domains of the Kingdom of Aragon and when King Alfonso V came to learn of these abuses he issued a decree, dated the 31st October 1433, by which he instructed the Jurats of the University to elect two procurators to receive and administer the income of the hospital and to see that the revenue was spent for the benefit of the patients under the supervision of the University and the Bishop of Malta.[14]

It has been suggested that the hospital was originally a leprosarium but no proof has been adduced in support of such a view. Whatever its original purpose, the earliest records that we possess as to its function and which date from the sixteenth century show that at this period of its history it was a general hospital. These records consist of two manuscripts describing the apostolic visits of the Bishop of Malta, Fra Martino Royas, in 1570 and in 1575.[15] Royas was informed by the hospital officials that the institution had a revenue of ninety 'ounces' a year and that it was administered by the Jurats of the University. It received patients of both sexes and also invalid people besides sick pilgrims and foundlings or '*esposti*'. These foundlings were unwanted babies, usually born out of wedlock, or legitimate children abandoned by destitute parents.

---

[7] My attention was first drawn to this document by the Very Rev. Fr. Bonaventura Fiorini, O.M.C., who found it in the Archivio di Stato of Palermo, Regia Cancelleria, vol. 3, (1347), 3 indic., p. 192, Fredericus. Subsequently I came across the same information in a manuscript entitled 'Privilegi dei Maltese' in the possession of Chev. Jos. Galea of Mdina.

[8] Abela, G. F., *Della descrittione di Malta*, Malta, 1647, p. 391; Ferres, A., *op. cit.*, p. 20.

[9] Manuscript 18, fol. 443, Royal Malta Library.

[10] Manuscript 402, no pagination, Royal Malta Library.

[11] Caruana, A. A., *Monografia critica della Cattedrale Apostolica di Malta*, Malta, 1890, 2nd edition, p. 39.

[12] Caruana, A. A., *Monografia critica della Cattedrale Apostolica di Malta*, Malta, 1899, p. 24.

[13] The Jurats were the aldermen or members of the Municipality or University of Mdina.

[14] Manuscript AA, Doc. XX. Cathedral Archives. Quoted in *Archivio Storico di Malta*, 1936, viii. 465.

The beds were few in number. Of the medical and nursing staff we are left in total ignorance. There was a woman who was entrusted with the care of the foundlings and with their farming out to wet nurses or foster mothers. There seems to have been no chaplain attached to the institution at this period for the Holy Sacraments were administered by the friars of the nearby convent of Saint Augustine. Very probably the association of the hospital with the Augustinian Friars started in 1551 when they were given shelter in the hospital for six years following the demolition of their own church and convent at Rabat because these buildings were obstructing the defence of the fortifications of Mdina.[16] The record of Royas' second visit to the hospital in 1575 adds nothing new to what has already been said, but a detailed and informative picture of the hospital as it appeared at this time has been left by Mgr. P. Duzzina who visited the hospital in the same year very soon after Royas' second visit.[17]

It may sound very strange to the twentieth-century reader to learn that this so-called hospital was a mere church. This, however, is not so surprising if we bear in mind that the modern concept of the hospital had not yet developed and that the early hospitals of Europe arose in connection with religious houses. Moreover it must also be appreciated that apart from churches hardly any public buildings existed in Malta before the arrival of the Order and that, in consequence, the churches were sometimes called upon to fulfil other functions besides the purely religious ones. We know, for instance, that the school run by the University of Mdina was held in a church[18] as was also the '*gymnasium puerorum*' at Birgu.[19] Patients suffering from plague were housed in the church of St. Sebastian at Rabat during pest epidemics[20] while the church of San Salvatore at Gozo was made to serve an even stranger purpose, i.e. as the repository of a huge artillery piece and other weapons.[21] Even as late as 1598 we meet with a request to the bishop from the civil authorities to allow them the use of the church of San Salvatore at Kalkara for the isolation of a number of Venetian sailors who were suspected of being infected with plague.[22]

---

[15] *Visitatio Royas 1570*, fol. 24; *Visitatio Royas 1575*, fol. 55. Archiepiscopal Archives, Valletta, Malta.

[16] Manuscript 1146 (vol. i), fol. 288, Royal Malta Library.

[17] Manuscript 643, Royal Malta Library.

[18] *Ibid.*, fol. 45. [19] *Ibid.*, fol. 257. [20] *Ibid.*, fol. 281. [21] *Ibid.*, fol. 232.

That the reception of patients in the church of Santo Spirito in Duzzina's time was not a temporary arrangement is proved by the assertion of the procurators that the 'church had always been used as a hospital'. However, adjoining the church was a large house with a garden but no mention is made that it was used for the accommodation of patients. We have not been told what this house contained nor why it was not used as a hospital in preference to the church.

The church was a small one judging from the fact that it had only three altars, so that we are not surprised to learn that it contained only four beds, two on each side of that part which was near the main altar and which was separated from the main body by a screen. In the enclosure thus formed the four beds were set up after the floor had been covered with wooden planks. Their bedding consisted of a mattress filled with flax and of a woollen coverlet. Apart from having to put up with this bare minimum of bedding, the patient did not even enjoy the luxury of a bed all to himself for two patients were placed in each bed in accordance with the custom of the times.

A surgeon was attached to the hospital[23] but we know nothing about the type of surgical and medical treatment that the patients received. It is evident from Duzzina's description that the hospital was not in a very satisfactory condition and that it had advanced very little, if at all, since its foundation. Duzzina tried to reorganise it by devising a set of rules for its government.[24] First of all he directed that the hospital should be provided with a dormitory with a wooden pavement and an altar at one end. Perhaps when he contemplated the creation of a dormitory he was thinking of utilising part of the large house already mentioned. Evidently Duzzina disapproved of the church being used as a hospital but in his order to have an altar erected in the new dormitory one can still discern the church-hospital idea—a combination that persisted for many years afterwards.[25] The dormitory was to contain eight beds, four on each side, and each bed was to have a palliasse, a mattress, two blankets in winter and four bed-sheets. This was a great improvement in bedding equipment but it is not known whether each bed had to accommodate two patients or not.

Mention has already been made that the hospital, besides patients, also catered for foundlings. According to a tradition prevalent among the people of Rabat, these foundlings were delivered to the hospital officials through a small window in the Hospital Street front of the institution.[26] The stone contour of this window can still be seen near the main door of the hospital.[27] The baby was placed, through the window, inside a sort of wooden cot or cradle that revolved on its vertical axis. When the cot was turned round by the depositor the baby came to lie inside one of the rooms of the hospital and in this way the parents disposed of the unwanted baby without revealing their identity. The contrivance was known as the '*ruota*' (Latin for 'wheel') and the earliest evidence of its existence occurs in the manuscript account of the apostolic visit of Mgr. B. Cagliares who saw it on the 28th November 1615.[28] The 'ruota' is also mentioned by all the bishops who visited the hospital between 1636 and 1728.[29]

---

[22] Parisi, P., *Aggiunta agli avvenimenti sopra la peste*, Palermo, 1603, p. 170.

[23] Manuscript 390, Royal Malta Library.

[24] Manuscript 643, fol. 622, Royal Malta Library.

[25] Manuscript 402, Royal Malta Library.

[26] Critien, A., 'The Foundlings under the Order and After', *Scientia*, 1949, xv. 11.

Duzzina laid down the following detailed rules regarding the reception, training and disposal of the foundlings:

1. The hospital is to continue to receive foundlings.
2. A note is to be made of the date of their reception.
3. The name of the wet nurse to whom they are entrusted is to be registered.
4. The time during which they are maintained at the expense of the hospital is to be recorded.
5. As soon as they are old enough they are to be taught a craft.
6. Records are to be kept showing with whom the foundlings have been apprenticed, their work attendances and the nature of the trade in which they are being trained.

Duzzina ended his instructions with an exhortation addressed to the procurators to carry out their administrative duties with religious zeal and in such a way as to merit the glory of Heaven rather than earn any material advantages. He also reminded them that if they were to guide themselves by the desire to do good they would have little need for rules and regulations for the proper government of the hospital. Duzzina, however, was not prepared to rely solely on the strength of his spiritual appeal and, to make sure that the procurators would not swerve from the path of duty, he ordered them to submit a detailed annual report about the administration of the hospital to the bishop or his vicar in accordance with the dispositions of the Council of Trent.

By 1599 the patients were no longer housed in the church. The number of beds was eight, as had been directed by Duzzina, and foundlings were being received at the rate of eight a year. Bishop Gargallo's record of his visit to the hospital in 1599 is the first document that mentions the presence of female nurses. They seemed to have gained some recognition, for when Gargallo inquired about the equipment of the hospital it was to them that he turned for the necessary information. In fact they told him that the institution possessed four plates of pewter and two bowls, two small vessels for the administration of syrups and a cauldron. Apart from these there were no other utensils of any sort.[30]

---

[27] June 1960.

[28] *Visitatio Cagliares 1615*, fol. 124, Archiepiscopal Archives, Valletta.

[29] *Visitatio Balaguer 1636; Visitatio Cocco Palmieri 1708; Visitatio Cannaves 1714.* No pagination. *Visitatio Mancini 1733*, fol. 23; *Visitatio Bussan 1728*, fol. 31. Archiepiscopal Archives, Valletta.

Mgr. Cagliares, in 1615, found that besides fever cases the hospital was also receiving patients suffering from other diseases.[31] To his successor in the episcopal see, Mgr. Balaguer, we owe a brief description of the hospital as it appeared in January 1636.[32] There was a large ward on the first floor which had six windows, one of which communicated with the church thus enabling the convalescent patients to follow the church services from the ward itself. On the ground floor there was a spacious courtyard planted with ornamental trees and shrubs surrounding a well of fresh water. Round the sides of the yard were ranged some rooms in which some old paupers were housed. Patients dying in hospital were buried in the church as was the custom all over the Island. Balaguer gives no details about the accommodation available but Mgr. Bueno, who inspected the hospital in 1667, is more informative. In that year there were nineteen beds for men and eleven beds for women in a newly erected ward.[33]

From 1685 onwards one fails to meet any further reference to male patients[34] and one is led to believe that it was about this time that the hospital became reserved entirely for women. No important changes occurred during the remaining years of the seventeenth century[35] but at the beginning of the following century an attempt was made at the classification and separation of the sick into medical and surgical cases. Thus in 1708 one ward was set apart for fever cases while in the other ward were admitted patients suffering from wounds and ulcers—all of whom, we have been assured by Bishop David Cocco Palmieri, were charitably and diligently treated.[36] All the beds were provided with canopies on iron posters at the corners.[37]

To the year 1708 belongs the first mention of a pharmacy in the hospital which was kept by the apothecary Michele Alfort. It is certain, however, that the pharmacy had been in existence before that year for one comes across references to an earlier hospital apothecary, Filiberto Gatt, who was Alfort's immediate predecessor.[38] In subsequent episcopal visits the pharmacy came in for a good deal of attention and the apothecary was required to satisfy the visiting bishop that the pharmacy was well stocked and provided with medicaments.

During the domination of the Order of St. John the Grandmaster was not the only person exercising political authority in the Island. The bishop and the Inquisitor made jurisdictional claims that resulted in prolonged controversies among these three powers. The municipality of Mdina could not avoid being dragged into this strife, sometimes siding with one party and at other times with another; and as Santo Spirito Hospital was administered by the University of Mdina its involvement in these struggles was also inevitable. In 1579, for instance, the hospital became a matter of contention between the bishop and the Grandmaster. Bishop Gargallo had claimed the right, granted to him by the Council of Trent, to make a juridical visit to the hospital but he was refused entrance into the institution by its administrators on the ground that they were subject to no authority but that of the Grandmaster. The bishop thereupon excommunicated them and a dispute arose between the bishop and the Grandmaster which, at one time, threatened to end in bloodshed.[39] These differences were only smoothed out in 1586 through the mediation of the Holy See.[40]

---

[30] *Visitatio Gargallo 1598*, fol. 33. Archiepiscopal Archives, Valletta.

[31] *Visitatio Cagliares 1615*, Archiepiscopal Archives, Valletta.

[32] *Visitatio Balaguer 1636*, Archiepiscopal Archives, Valletta.

[33] *Visitatio Bueno 1667*, Archiepiscopal Archives, Valletta.

[34] *Visitatio Cocco Palmieri 1685*, Archiepiscopal Archives, Valletta.

[35] *Ibid.*

[36] *Visitatio Cocco Palmieri 1708*, Archiepiscopal Archives, Valletta.

[37] *Visitatio Cannaves 1714*, Archiepiscopal Archives, Valletta.

[38] Manuscript 46 Università, Royal Malta Library.

In 1614 Grandmaster Alofius de Wignacourt attempted to impose his own commissioners to audit the accounts of the hospital. The Grandmaster's move was bitterly opposed by the municipality and things reached such a pass that the matter was referred to Rome for settlement. The result was that Rome upheld the old procedure and the Grandmaster was forced to retreat and to desist from interfering in the hospital administration.[41] This respite, however, was only temporary for the policy of peaceful penetration was persisted in with tenacity so that nearly one hundred years later Grandmaster Ramon Perellos succeeded where Wignacourt had failed. In fact by a decree of the 1st June 1708 it was laid down that the Seneschal of the Grandmaster was to preside over the Jurats and that their meetings were to be attended by one of the auditors of the Grandmaster.[42] In this manner the administration of the hospital did not remain the exclusive province of the municipality and of the bishop but came within the ambit of control of the Order of St. John.

Meanwhile the institution was being enriched by various endowments and donations. Part of its revenue was derived from rural property that originally belonged to Saint Publius in the district of Bur Marrad.[43] After deducting the expenses involved in providing food and treatment for the sick, salaries of hospital staff and the maintenance of the foundlings, enough funds remained to support a pharmacy for the use of the public and to provide alms for a few disabled men in 1647.[44]

The hospital revenues were augmented still further in the eighteenth century thanks to the donations of several benefactors. On the 9th March 1717 Dr. Filippo Gauci and his wife left considerable property to the hospital stipulating that the income deriving therefrom was to be spent on the treatment of poor sick women from the countryside and specifying that not only fever patients were to benefit from their donation but also those suffering from other kinds of illnesses. The Gaucis further insisted that the sick were to be accorded all the medicaments that their condition required whether their illness was of a medical or a surgical nature. Hospital treatment was to be continued until the patient became convalescent or until it was clear that the malady had reached an incurable stage.[45] Another donation in the form of a large sum of money was made in 1736[46] and other endowments followed in the same century.[47] A mass for living and dead benefactors was sung on the feast of Pentecost, when the feast was celebrated in the hospital church with great ceremony in which the Chapter of the Cathedral took part.[48]

---

[39] Vertot (Abbé de), *The History of the Knights of Malta*, London, 1728, vol. ii, p. 54.

[40] Collura, P., 'Le due missioni di Mons. Ludovico De Torres in Malta', *Archivio Storico di Malta*, 1936, viii. 39.

[41] Ferres, A., *Storia ecclesiastica di Malta*, Malta, 1877, p. 228.

[42] Debono, P., *Sommario della storia della legislazione in Malta*, Malta, 1897, p. 190.

[43] Ferres, A., *Storia ecclesiastica di Malta*, Malta, 1877, p. 41.

[44] *Raccolta di varie cose antiche e moderne riguardanti Malta e Gozo*, Malta, 1843, p. 28.

The institution enjoyed the esteem not only of private citizens but also of public bodies. Indeed every year the Magistrate of Mdina paid an official visit to the hospital on Holy Saturday in the company of the Governor of the city.[49] Moreover when His Eminence[50] took solemn possession of Mdina, following his election to the Grandmastership, the hospital was listed among the institutions that were entitled to receive gifts on that occasion from the new Grandmaster. These gifts were offered by the Magistrate of the city to the Grandmaster who then distributed them to the various personages and institutions according to ancient usage. The hospital received two capons, twelve hens, twenty-four cockerels and forty-eight pigeons. They were handed to the procurator of the hospital to be consumed by the patients.[51]

Increased wealth made it possible to enlarge the building in proportion to the augmented demands made upon it. The hospital had undergone structural alterations in 1613[52] while in 1688 the chapel was rebuilt under the auspices of Grandmaster Gregorio Caraffa on the designs of Lorenzo Gafà.[53] It came to have three altars. The painting over the main altar depicts the coronation of the Blessed Virgin Mary with St. Paul on one side of the canvas and a knight of the Order of St. John, believed to be Grandmaster Caraffa himself, on the other side. The altar on the right was dedicated to St. Anne and the one on the left to Saints Cosmas and Damian. This altar was erected on the initiative and at the expense of the physicians and surgeons of the hospital who were also responsible for the celebrations of the religious festivities on the saints' feast day.[54]

---

[45] Manuscript 402, Royal Malta Library.

[46] *Ibid.* [47] *Ibid.*

[48] *Ibid.* This feast was still being celebrated in 1816 as also the mass founded by Dr. S. Bernard on the feast of SS. Cosmas and Damian. Manuscript 53 Università, Royal Malta Library.

[49] Manuscript 388, fol. 15a, Royal Malta Library.

[50] 'Eminence' and 'Serene Highness' were titles borne by the Grandmasters.

[51] Manuscript 388, fol. 16a, Royal Malta Library.

[52] Manuscript 402, Royal Malta Library.

[53] Ferres, A., *Descrizione storica delle chiese di Malta*, Malta, 1866, p. 123.

Very extensive modifications and additions were carried out in 1729 during the time of Grandmaster Manoel de Vilhena[55] when the hospital was enlarged with a view to enabling it to receive a greater number of patients.[56] From an undated document written by an anonymous Franciscan friar during the time of Grandmaster Manoel Pinto (1741–73) we gather that the number of wards had been increased to three and that they were very large.[57] The writer further states that the hospital was well equipped and conducted both as regards the treatment of patients and their dietary. Only destitute countrywomen were admitted. The professional staff consisted of two physicians, a surgeon, two barber-surgeons and a pharmacist.[58] A perusal of the registers kept by the pharmacist from 1730 onwards shows that the most frequently prescribed medicines were emetic wines, camomile water, sweet almond oil and spermaceti for the medical patients; while ointments of litharge and of turpentine, unguentum basilicum, unguentum digestivum and tincture of myrrh were issued almost daily for the surgically sick.[59]

In 1778 three important administrative innovations were made. First, accommodation was increased to forty beds; second, arrangements were made for nursing mothers who entered hospital to have their babies looked after by a wet nurse at the expense of the hospital during the mother's illness;[60] third, a kind of hospital board was set up. It met once a month and was composed of the Jurats, the procurators and the medical staff. The scope of this board was to discuss matters that concerned the administration of the hospital and the welfare of the patients. The decisions of this board had to be submitted to the Seneschal[61] and approved by him before they were implemented.[62]

Girls below the age of ten years were barred from admission in accordance with an old rule of the hospital, but in November 1780, following a suggestion by the hospital board, this rule was rescinded and girls were allowed to enter hospital after reaching their eighth year. They were only to be admitted, however, on condition that 'they took the medicines prescribed for them by the physicians, remained quiet, refrained from weeping and from indulging in those disturbances that are characteristic of their age but which upset the adult patients'.[63]

[54] *Visitatio de Bussan 1715*, fol. 43, Archiepiscopal Archives, Valletta.

[55] Manuscript 402, Royal Malta Library.

[56] Micallef, R., *Origin and Progress of the Charitable Institutions*, Malta, 1901, p. 4.

[57] *Visitatio de Bussan 1715*, fol. 43, Archiepiscopal Archives, Valletta.

[58] Manuscript 402, Royal Malta Library.

[59] Manuscripts 50, 51 and 52 Università, Royal Malta Library.

[60] Manuscript 53 Università, Royal Malta Library.

[61] The Seneschal was 'the Grandmaster's right-hand man'. Mifsud, A., *Knights Hospitallers of the Venerable Tongue of England*, Malta, 1914, p. 149.

[62] Manuscripts 378 and 44 Università, Royal Malta Library.

[63] *Ibid.*

During the time of Grandmaster Manoel de Rohan, in March 1795, the statutes of the hospital were revised, old rules discarded or amended and new ones added.[64] A consideration of these reformed statutes leads one to the conclusion that, while from the political viewpoint the municipality of Mdina might have been right in opposing the intervention of the Grandmaster in the affairs of the hospital, the institution ultimately gained when it fell under the control of the officials of the Order of St. John.

The Seneschal remained the ultimate head of the hospital organisation but the Jurats of Mdina were immediately responsible for its administration. Each Jurat did duty for a week. Among other things he had to ascertain that the doctors, surgeon, pharmacist and barber-surgeon were all in hospital at the appointed times of the medical visits and to make sure that the wards were clean and free from offensive odours. He had to accompany the doctor during his ward round but he was 'to keep at a distance from the patient's bed and to see that all unnecessary personnel did likewise in accordance with the dictates of decency'.

There were three doctors on the staff, two seniors and a junior. Each of them was on duty for a month and had to do two daily visits, a morning and an afternoon one. During his visit the physician was accompanied by the barber-surgeon who wrote down the doctor's orders, by the surgeon who did the same in his own book and by the nurse who received her instructions verbally. The physician was obliged to see that the barber-surgeon and the surgeon wrote down the medicaments prescribed by him, to affix his signature to them and also to state the true cost and value of the drugs. In cases of grave and dangerous illnesses he had to hold a consultation with the other two doctors on the staff. He was, in turn, to be available for consultation by the surgeon when the latter needed his advice in cases of serious wounds especially those involving the head. When the physician and the surgeon were of conflicting opinions about the case, the other two physicians were to be consulted and, if necessary, the opinion of some other surgeon was to be obtained. The doctor was in duty bound to order the administration of the Holy Sacraments to feverish patients within the third or fourth day of their admission. At the end of his month of duty the outgoing physician had to hand over the patients to his successor with 'diligence and clarity' so that the incoming doctor would be less liable, in treating the sick, to fall into the errors and misunderstandings 'of a faculty so uncertain and obscure'. The doctors were especially warned not to discharge their patients in the first days of their convalescence as it was then believed that patients were especially liable to develop consumption when recovering from an acute illness. Finally the physician had to inspect the drugs supplied to the hospital pharmacy to make sure that they were fresh and of good quality.

---

[64] Manuscripts 378 and 45 Università, Royal Malta Library.

The surgeon, besides consulting the physician in the cases already mentioned, was to seek the physician's advice before undertaking a risky operation. As an added safeguard a surgeon of high standing was to supervise its actual performance. The surgeon was prohibited from ordering purges, decoctions and other medicaments the prescription of which was reserved exclusively to the physician. He was to dress serious wounds twice daily and slight injuries only once during the day.

The barber-surgeon, apart from his surgical duties, was also in charge of the diets and of the clerical work of the hospital. The application of leeches was entrusted to a woman whose services were called upon when the occasion arose.[65]

Although the prescriptions were written by the barber-surgeon and by the surgeon, the pharmacist had to be present during the doctor's visit to make sure that the physician's orders were properly understood. He was not allowed to dispense medicines solely on the doctor's verbal authority or to issue medicaments and drugs to outsiders.

The chaplain performed both religious and administrative duties. He had to celebrate mass on Sundays and feast days at the altar of the ward, to hear the confessions of the patients as soon as they entered hospital and to teach doctrine on Sundays to those who were not gravely ill. It was also incumbent on him to ensure that the hospital gate was locked in the evening and to keep the keys in his possession until the following morning; to settle any disputes that arose among the sick or staff; to see that the behaviour of the patients and employees did not offend against morals and, finally, to prevent the nurses and the family of the cook from indulging in singing and other noisy diversions!

The nurses were enjoined to see that spinsters were kept apart from married patients as far as accommodation permitted; that only relatives were admitted to see the sick, especially the spinsters; that visitors did not bring in any food; that the ward was kept clean and that the floor was dusted every morning—not neglecting the space underneath the beds! They were warned not to abandon the patients or the ward to stay 'to amuse themselves at the main door of the hospital'. They were to pay special attention to dying patients; to search under the mattresses to make sure that no unauthorised food was hidden there by the sick; to light the oil lamps at night and not to leave the ward in darkness to save the oil for themselves. Any infringement of these rules was punished by the suspension of rations for a fortnight or the loss of their salary for one to two months and by dismissal from the service on a second offence.

The cook was burdened with duties that had no connection with the culinary art, such as lighting the lamp in the hall of the hospital, sweeping the church floor on Saturdays and preventing persons who went to draw water from the hospital well from tarrying there to gossip. He also had to summon the physician in case of an emergency, while during the fever epidemic of 1799–1800 he was impressed for service in the transport of patients to the hospital.[66]

---

[65] Manuscript 49 Università, Royal Malta Library.

In 1710 two beds were set apart for patients labouring under diseases other than fevers. More of the latter class of patients were admitted when accommodation was available but a number of beds was always reserved for fever cases who were given preference over all others. Diagnosis in those days was a symptomatic and not an aetiological affair. Thus diseases in which a high temperature was the main manifestation were labelled as 'tertian' or 'malignant' fevers according to the pattern of temperature variation. The treatment of fever cases in those days consisted chiefly in the exhibition of ipecacuanha and the resort to vesicants and blood-letting.[67] The admission of syphilitic cases was expressly forbidden and when a 'fever' patient was subsequently found to be suffering also from syphilis she was discharged as soon as the fever subsided. On the other hand girls affected with small-pox and measles were not refused admission provided they were over seven years of age.

Consumption was well known to the eighteenth-century physician who regarded it as a contagious disease. Not only the sputum but also the patient's breath and sweat were believed to contaminate those with whom the patient came in contact; for this reason sheets, mattresses and even the bed itself were burnt.[68] This was the motive behind the hospital rule that patients with consumption, and even those who were only suspected of harbouring the disease, were to be provided only with beds and bedding specially reserved for them which could be destroyed without burdening the hospital with an unduly heavy loss. 'Infected' clothing was kept in a special room until it was burned.[69]

Patients who discharged themselves against medical advice were not re-admitted if they returned to hospital with the same complaint. Patients dying in hospital were buried in the hospital church but precautions were taken to prevent the occurrence of unpleasant odours 'that prejudice the health of the public'.[70] In August 1795 the privilege of admission was extended to non-destitute women who were received as paying patients; syphilitics were still not entitled to hospital treatment but they could obtain admission at the Women's Hospital or 'casetta' at Valletta.[71]

The end of the century saw the opening of a new chapter in the history of Santo Spirito Hospital. On the 12th June 1798 the Order of St. John was expelled from Malta by Napoleon and the French took possession of the Island. By a decree of the 16th June the Holy Infirmary became reserved exclusively for the French and was thus turned into a military hospital.[72] The male civilian patients were transferred to the nunnery of Saint Maddalena and the church which adjoined it.[73] On the 2nd September of the same year the Maltese rose against the French who remained blockaded in Valletta and the Three Cities until the end of the insurrection on the 4th September 1800. This circumstance deprived the inhabitants of the countryside of their main hospitals which were situated in Valletta, so that during the French blockade the insurgents had no hospitals available except those of Saura and Santo Spirito. In this manner the latter hospital became the centre for the storage and distribution of medicaments to the Maltese insurgents, and the main hospital for the reception of patients from the areas controlled by the blockading troops.

---

[66] Manuscript 192 Università, Royal Malta Library.

[67] Bernardy, A. A., 'Antoine de Favray', *Archivio Storico di Malta*, 1936, viii. 63.

[68] Fasani, T., *Discorso sulla tisichezza*, Napoli, 1782.

[69] Manuscript 49 Università, Royal Malta Library.

[70] Church burial persisted in this hospital until 1842. Manuscript 402, Royal Malta Library.

[71] Manuscripts 378 and 44 Università, Royal Malta Library.

It functioned as a military hospital for the duration of hostilities, and the apothecary, Mariano Agius, prepared and issued the medicaments needed by the insurgent army from the hospital dispensary. Urgent requests for bandages, astringent powders, styptic water, camomile and anodyne waters, white ointment etc. came from the batteries of San Giuseppe, 'tas-Samra' and Kordin. These demands were so frequent and insistent that the commandant of the battery of San Giuseppe felt embarrassed at the repeated requests emanating from his battery and when, in November 1798, circumstances compelled him to make further demands he confessed that he did so 'with a blush'.[74]

The documents of the Mdina municipality of this period contain the correspondence that passed between the apothecary and the Jurats relating to the supply of drugs to the hospital and the battalions, and to the payments made out to him by the government in the early days of the British occupation of the Island.[75] It appears that the prices of the medicaments paid by the government were calculated on the 'Taxa' of 1769 for in August 1800 the apothecary filed a petition asking for the revision of the prices, especially of honey and sugar, which he imported mostly from Sicily at a cost considerably higher than that obtaining in 1769. His request was granted.

It was not long before the Maltese, with their British and Portuguese allies, discovered that besides the French they had to fight two far more formidable enemies—hunger and sickness. Indeed by the beginning of February 1799 the poor were dying of starvation while in the following month an epidemic of fever was decimating the inhabitants of the countryside.[76] In this situation it is no wonder that Santo Spirito Hospital soon proved to be too small to accommodate all the sick people who were brought to it. To remedy this state of affairs, several temporary hospitals were set up in churches and other buildings in various parts of the countryside for the reception of civilian and military patients, and the hospital lost its recently acquired importance though, as has already been said, it did not cease to serve as a central depot of medical and surgical stores. It came out of the war impoverished and in very bad shape. Many mattresses, pillows and much of its bed linen had been requisitioned by the French before the insurrection. What remained of its equipment was entirely consumed during the two years of the blockade. Much of its silver, too, had had to be sold as a contribution to the expenses of the war.[77] With the return of peace in the Island at the beginning of the nineteenth century, the hospitals belonging to the government were reorganised and from then onwards Santo Spirito lost its independence as did the other charitable institutions with which it was merged.

---

[72] Hardman,W., *A History of Malta*, London, 1909, p. 83.

[73] Badger, G. P., *Historical Guide to Malta and Gozo*, 1879, p. 175.

[74] Manuscript 192 Università, Royal Malta Library.

[75] *Ibid.*

[76] Hardman, W., *op. cit.*, pp. 178 and 203.

On the suppression of the municipality of Mdina by Sir Thomas Maitland in December 1818 (Proclamation XI of the 30th December) the whole of the property and other revenues of the hospital were transferred to the Collector of Land Revenue[78] and the management of the institution to the Permanent Committee of the Charitable Institutions.[79] The reception of exposed children also ceased in this year.[80]

In January 1825 a suggestion was made to transfer the sick to the Valletta Hospital and to appropriate the funds of Santo Spirito for the support of the newly established House of Industry of Floriana. This attempt to destroy the centuries-old hospital was averted by one of the members of the Permanent Committee—the Very Reverend Archdeacon F. Saverio Caruana (later Archbishop)—who was prevented by 'certain scruples of conscience' from putting his signature to a letter recommending 'the appropriation of any money left and allotted to pious uses otherwise than as the will of the donor desires'.[81]

In January 1838 the hospital was incorporated with that of Valletta forming, as it were, a branch of the latter. Its bed complement at this period was sixty.[82] For a short while in 1871 it served as an isolation hospital for cases of smallpox during the epidemic that occurred in that year. Its individuality was completely effaced in 1883 when it was annexed to the general hospital of Floriana as a convalescent sanatorium,[83] a role which it has continued to fulfil up to the present time.

---

[77] Manuscript 183 Università, Royal Malta Library.

[78] Julyan, P. G., *Report on the Civil Establishments of Malta*, London, 1880, p. 66.

[79] *Permanent Committee 1st January 1816–31 December 1829*, fol. 94, Medical & Health Archives, Valletta.

[80] *Reports of the Commissioners appointed to inquire into the Affairs of the Island of Malta*, London, 1838, Part III, p. 9.

[81] *Permanent Committee*, *loc. cit.*, fols. 65, 94, 99 and 139, Medical & Health Archives, Valletta.

[82] *Minute Book 13th September 1837–27th June 1843*, fols. 164 and 180, Medical & Health Archives, Valletta.

[83] Micallef, R., *op. cit.*, p. 5.

CHAPTER 4

The Holy Infirmary and The Hospital of the Italian Langue at Birgu

DURING the first three decades of the sixteenth century Malta, together with Spain, Germany, Italy, Sicily and other countries, formed part of a vast empire under the rule of Emperor Charles V. These lands, forming the Holy Roman Empire, were pitted against the might of the Moslem possessions which stretched from the eastern borders of Germany to the Persian Gulf and embraced the entire North African coast from Egypt to Morocco.

As the domains of Charles V were too far-flung for adequate defence, the king grasped the opportunity in 1530 to cede Malta as a fief to the Knights of the Order of St. John of Jerusalem—the sworn enemies of the Moslems—and thus turn one of the neglected outposts of his empire into a strong fortress. The Knights were then still in search of a permanent seat following their expulsion from Rhodes by the Moslems; they therefore accepted the offer of Malta as a home and installed themselves in 1530, since when they have come down in history as the Knights of Malta.

Although the Order of St. John of Jerusalem gained fame as the military and naval organisation that kept the Turks at bay in the Mediterranean Sea for several centuries, it is worth while remembering that its original purpose was not military. Indeed the ideal of its founders was the care of the sick and wounded and the relief of the poor, whence their designation of Hospitallers.

The Order of St. John owed its inception to some merchants from the flourishing city of Amalfi who, about the middle of the eleventh century, obtained permission from the Egyptian Kaliph, the ruler of Palestine, to establish a hospital in Jerusalem for the nursing of the pilgrims who fell sick while visiting the Holy Land.[1] In those days a pilgrimage to Jerusalem was regarded as a meritorious Christian duty and equally commendable was the assistance of travellers on their way to the Holy Land. Inspired by this ideal a band of men dedicated themselves to the charitable services of the hospital and thus formed the nucleus from which arose the Order of St. John, which soon gained the esteem of all Christians and was endowed with the bequests of grateful pilgrims and other benefactors.

---

[1] Laferla, A. V., *The Story of Man in Malta*, Malta, 1939, vol. i, p. 58.

A Frenchman, called Peter Gerard, is regarded as the first ruler of the brotherhood. Various views have been put forward as to how the members of the Order came to be known as Hospitallers of St. John. Those who credit John Hyrcanus with the foundation of the hospital state that he bequeathed his name to the Order. Others hold that the brotherhood derived its name from its dedication to either St. John the Almoner, a philanthropic bishop of Alexandria, or to St. John the Baptist.[2]

At first the members were not bound by any particular rules but later they formed themselves into a religious association embracing the rules of St. Augustine and taking the three vows of chastity, obedience and poverty. In 1134 Pope Innocent II took the Order under the immediate protection of the Apostolic See. The brethren wore a black robe marked with a white cross of four double points, a symbol that has come to be known as the Maltese Cross. Within a short time hospitals and hospices, in connection with the parent hospital at Jerusalem, soon sprang up in various parts of Europe. Arms were first borne by the fraternity under Grandmaster Raymond du Puy (or Puis) (1120–60). This military development was rendered necessary by the turbulent times in which the Hospitallers had to carry out their humane mission, when a certain measure of armed protection became essential for their survival. From then onwards they were constantly at war with the Moslems to protect the Christian flags of every nation from the Ottomans.

The members were divided into the following classes according to their birth, rank and functions: (a) Military Knights who had to be of noble birth on both sides for four generations, (b) Ecclesiastics who, as Conventual Chaplains or Chaplains of Obedience, performed religious duties in the hospital and the Conventual Church, (c) Serving Brothers-at-arms who were neither knights nor priests; they served under the knights in wartime and in the hospital in peacetime.[3] As the fraternity was an international institution the brethren were separated into languages or nations according to their place of origin. At the head of each nation or langue was a high dignitary who bore a special title and filled some specific office in the Order's administration. The government of the hospital services, for instance, was entrusted to the head of the French Langue who was styled the Grand Hospitaller.

The Jerusalem hospital was set up in 1048.[4] For over a century they carried out their hospital work in Palestine until they were expelled by the

---

[2] Bedford, W. K. R., *The Regulations of the Old Hospital of the Knights of St. John at Valletta*, London, 1882, p. vii.

[3] De Boisgelin, L., *Ancient and Modern Malta*, London, 1805, vol. i, pp. 181 and 211.

[4] Dal Pozzo, B., *Historia della Sacra Religione di Malta*, Verona, 1703, p. 2.

Moslems and had to repair to Acre in 1191. When Acre was lost by the Christians, the Knights went to Cyprus in 1291 whence they passed on to Rhodes in 1310 which they gave up to the Turks in 1522. After a stay at Viterbo, in Italy, they finally settled in Malta. Through all their wanderings they always considered it their primary duty, when settling in a new place, to found a hospital. This loyalty to their ideal gained them the respect of both their friends and enemies, and following the expulsion of the Christians from Jerusalem the Hospitallers were allowed by the Moslems to continue to care for the wounded and the sick until these were fit to travel and leave the city. At the time of its arrival in Malta the Order vaunted its 'special profession of serving the sick as if they were its masters' and the Grandmaster felt proud of 'not possessing any other title beyond that of Master of the Hospital of Jerusalem and Custodian of the Poor of Jesus Christ'.[5]

The Knights found only one hospital in Malta—that of Santo Spirito at Rabat. As they chose to settle at Birgu, they decided to establish their own hospital in this town at a convenient distance from their seat of government. The houses at Birgu, however, were so few and so small that it was with the greatest difficulty that accommodation was found for the infirmary, which at first was of a temporary character. Not until two years later did the Grandmaster finally decide to settle in Malta and to erect a permanent hospital.[6] The experience of Grandmaster L'Isle Adam as Grand Hospitaller at Rhodes may have influenced him in the selection of the site for the new hospital. Indeed that part of the foreshore of Birgu facing Salvatore Hill and looking across Kalkara Creek was chosen by him because he deemed it to be 'very healthy and convenient'.[7] Many houses that existed in this area were expropriated and demolished. The foundation ceremony took place in the morning of the feast of All Saints in November 1532. After celebrating mass at the church of St. Lawrence a procession of the dignitaries of the Order moved to the chosen site which was blessed by the Grandmaster, who planted a cross thereon declaring it to be the place destined for the building of the Infirmary. The ceremony was resumed the following day when, after attending the service in commemoration of the Dead at the same church, the Grandmaster again went to the site in the same ceremonial manner as on the previous day and laid the foundation stone.[8] From that day onwards the Grandmaster inspected the work almost daily and watched the hospital grow. When it was ready it was 'most beautiful, magnificent and spacious' as befitted 'the main profession of this Order which is the care of the sick'.[9] The building was completed in 1533, the event being commemorated by an escutcheon bearing the coat-of-arms of Grandmaster L'Isle Adam with the date 1533 carved below it. This escutcheon is fixed in what was formerly the main courtyard of the infirmary.[10]

---

[5] Bosio, J., *Istoria della Sacra et Illustrissima Religione*, Roma, 1684, p. 118.

[6] *Ibid.*, pp. 89 and 118.

[7] *Ibid.*, p. 118.

[8] Baudoin, J., *Histoire des Chevaliers de l'Ordre*, Paris, 1659, p. 261.

[9] *Ibid.*, p. 261.

As originally built, the hospital was a four-sided structure covering a little more than two-thirds of an acre. It is probable that its boundaries coincided with the limits of the building now contained between St. Scolastica Street and Gunlayer Street, front and back, and the two side streets known respectively also by these names.[11] It consisted of one storey on the St. Scolastica Street front and of two floors on the side facing the sea. Four wards were situated on the St. Scolastica storey. The pharmacy, chapel, administrative offices, quarters of the medical staff, refectory and kitchen were also on this floor. All these rooms surrounded three sides of a large cloistered courtyard of a quadrangular form. On its fourth side was the main entrance of the infirmary. A smaller courtyard was situated on the Gunlayer Street ground floor at a lower level than the quadrangular courtyard already alluded to. It gave access to a number of rooms which were used for the storage of provisions and equipment, the laundering of the patients' clothes and the housing of the menial employees of the hospital. As the stone for the erection of the Holy Infirmary was obtained on the spot a large quarry was formed which was turned into a rainwater reservoir for the use of the hospital.

The earliest statutes governing the administration of the Order's hospitals were those promulgated by the second head of the Order—the Blessed Raymond du Puy—between 1120 and 1160. As each necessity arose these statutes were amended and added to so that by the time the Knights came to Malta the administration of their hospitals had reached a high degree of development. The Birgu hospital was governed by the same regulations that had been in force in Rhodes. These regulations were confirmed and codified by the Chapter General held in 1588. The over-all head of the hospital organisation was the Grand Hospitaller, who was one of the highest officials of the Order, ranking next to the Chancellor and the Marshal. He was required to submit reports about the hospital to the Chapter General. After the Grand Hospitaller came the Infirmarian or director who was also of the French Langue and was the officer in immediate charge of the institution. He visited the sick daily and saw that they had all the nourishment prescribed to them; that they behaved with 'great civility'; that a sufficient number of servants was available to attend to the sick; and that the deceased received a decent burial.

Two comptrollers or 'prud'hommes' were chosen annually by the Grandmaster and the Council. They were in charge of the provision of food and equipment. They kept an inventory of the hospital furniture and other property, marked each article with the Hospitaller's seal to prevent it being taken away from the infirmary and kept the accounts of all the expenses incurred by the hospital. They also had to see that the wills of the patients dying in hospital were punctually executed.

---

[10] Critien, A., *The Birgu Holy Infirmary*, Malta, 1950, p. 19.

[11] *Ibid.*, p. 11.

The Chaplain and the Prior said mass daily in the hospital chapel, heard confessions, administered the Sacraments and accompanied the dead to their burial place.

The physicians were required to be 'learned and experienced' and to swear on oath that they would do their best for the recovery of the sick. They were enjoined to base their clinical work on the 'practice and writings of the most approved physicians' and were to visit the patients at least twice daily accompanied by the hospital secretary who wrote down their prescriptions and instructions. As they received a salary from the Common Treasury they were forbidden from asking for, or accepting, fees from the patients. Surgeons were not employed by the Holy Infirmary unless they had been first examined and approved by the physicians. They had to be 'prudent, discreet and skilful in their profession'.

Originally the infirmary was supplied with drugs by three private apothecaries who were appointed by the Chapter General (1548) and whose pharmacies were at Birgu.[12] This arrangement, however, proved to be impracticable as these pharmacies were at some distance from the infirmary. It was, therefore, decided by the Chapter General of 1555 to establish a pharmacy in the hospital itself for the better service and convenience of the sick. The same Chapter took the opportunity to lay down regulations for the good conduct of the affairs of the new pharmacy. The apothecary had to compound his pills, electuaries, ointments, etc. in the presence of the physicians and surgeons to ensure that the ingredients were of good quality and well mixed. If the apothecary dared to disregard this ruling he was dismissed the service and his drugs were thrown away. In accordance with ancient usage the Hospitaller, in the company of the medical staff, paid surprise visits to the pharmacy to inspect the drugs, to retain those in good condition and burn those which had deteriorated. If the apothecary tried to conceal any of his medicaments from the Hospitaller he was deprived of his salary for a whole year. All the pharmacy employees were examined to ensure that they were proficient in their art. Inefficient personnel were expelled from the service.[13] So great was the importance attached to the proper functioning of the hospital pharmacy that when the Chapter General of 1574 decreed the erection of a new infirmary at Valletta, they decided that the apothecary who was to take charge of it was to be of 'a conscientious character, excellently skilful and experienced in the pharmaceutical art' and one who could be relied upon to dispense the medicines only to the infirmary patients.[14]

A copy of the hospital regulations was hung up in hospital for the guidance of the patients in order that the rules of the institution could be 'more surely and exactly observed'. The sick were not allowed anything by way of food except what was ordered by the physician. They were forbidden to make noise, play cards, dice or chess or read aloud. Those

[12] Archives 297, fol. 163, Royal Malta Library.

[13] Archives 299, fol. 12, Royal Malta Library.

[14] Archives 290, fol. 29, Royal Malta Library.

who were disobedient or insolent were turned out of the hospital. On admission all patients had to confess and to receive Holy Communion. They were also admonished to draw up their wills. These were written by the Prior or the secretary of the infirmary in the presence of at least two witnesses. When a patient could not or would not make his will, the Prior or other official drew up an inventory of all the patient's belongings for delivery to his heirs if he chanced to die.[15]

In spite of these wise regulations the administrative affairs of the hospital were not always above reproach. By 1572 abuses had crept into its government and the Grandmaster himself was obliged to intervene to put a stop to the mismanagement by which, we are told, the officials of the infirmary were bringing it to ruin. What these abuses were and what reforms were introduced in the hospital administration to check them, the historian of the Order does not state.[16]

Besides catering for members of the Order the Holy Infirmary was also open to male civilians. It has been suggested that admission for civilians was very probably restricted to the male inhabitants of only that part of the Island comprising Birgu, the parishes of Zejtun, Zurrieq, Qormi, Gudja and the adjoining countryside.[17] This implies that the inhabitants of the rest of the Island, which was under the control of the municipality of Mdina, were not received into the Holy Infirmary but were admitted into Santo Spirito Hospital. On the other hand we have it on record that the infirmary was open to 'all the pilgrims and to all the sick that happened to come to Malta from all parts of the world';[18] it is, therefore, hard to believe that while hospitalization in the Holy Infirmary was offered to foreigners it was denied to a section of the inhabitants of the Island.

A number of beds was always reserved for the reception of the wounded soldiers, sailors and knights landed in Malta after some sea-fights. It must be remembered that in the sixteenth century the Christians of all nationalities were continually engaged in warfare against the Turks and the Barbary corsairs and that naval encounters were a common occurrence. Tripoli too belonged to the Order and men who there sustained wounds or fell ill were brought to the Birgu infirmary for treatment.[19]

Besides the sick the Holy Infirmary also cared for orphans and foundlings. Two women were employed to bring up these children. Among the measures decided upon by the Chapter General of 1566 to commemorate the liberation of Malta from the Turks in the previous year was the provision that six poor girls were to be granted a marriage dowry by the Order every year, preference being given to 'poor virgins who have been brought up in the Infirmary'.[20]

---

[15] Vertot (Abbé de), *The History of the Knights of Malta*, London, 1728, vol. ii, p. 24.

[16] Dal Pozzo, B., *op. cit.*, p. 50.

[17] Critien, A., *op. cit.*, p. 11.

[18] Bosio, J., *op. cit.*, p. 197. [19] *Ibid.*, p. 124. [20] *Ibid.*, p. 732.

The Holy Infirmary enjoyed the same privilege of sanctuary as many churches. Not all law-breakers, however, were entitled to this privilege. In fact when an offender took refuge in the infirmary it was up to the Hospitaller to decide whether the refugee from justice was to be granted the benefit of sanctuary or not. If, after a careful investigation of his case, it was resolved to give him protection and asylum, he was maintained in the infirmary until he could be sent away from Malta on the first available ship to leave the Island. Restrictions were imposed on this privilege by Grandmaster Claude de la Sengle (1553–1557), such delinquents as murderers, poisoners and robbers being excluded from the right of asylum.

A few years after its completion the infirmary became incapable of providing all the beds needed for those seeking admission. In 1538 the Chapter General of the Order resolved to enlarge it and soon after a third storey was added to the original building by Grandmaster Jean d'Omedes. Following this extension of the hospital, a sufficient number of beds became available for the ordinary day-to-day demands made upon its resources so that in 1543 the infirmary was once more deemed to be 'very beautiful and spacious'.[21] Its accommodation, however, fell far short of requirements in an emergency as, for instance, in June 1557 when the hospital was filled with the wounded brought back from the expedition against Rhodes. Major difficulties occurred again in 1560. In December of the previous year about 14,000 Italian, Spanish and German soldiers disembarked at Malta under the command of the Viceroy of Sicily. This army had been assembled by several Christian powers to attack Tripoli and wrest it from the Turks. By the beginning of January 1560 illness appeared among the troops and spread very rapidly.[22] To provide the necessary accommodation for the unusually large number of sick soldiers, the number of beds at the infirmary was doubled. Not only the wards but also the corridors were crowded with beds; yet even this measure proved inadequate to meet the situation. Grandmaster Jean la Vallette therefore evacuated the parish of Birkirkara of its inhabitants and requisitioned their homes and bedding for the sick troops who could not be received into the infirmary.[23] This operation involved the displacement of several thousands of persons. In the meantime the infection spread to the crews of the vessels anchored in the harbours of the Island. The sailors were dying of 'petechiae' and of 'other contagious and pestilential diseases'. To avoid further spread of the epidemic among naval personnel the ships were washed with vinegar and the crews taken ashore and received into a temporary hospital. We are told that the Grandmaster himself visited the sick troops to comfort them and very often to nurse them with his own hands. The demands made on the Treasury of the Order and on the economy of the Island during this epidemic were enormous but 'it seemed that the Island of Malta was performing miracles in that year' because it never failed to supply fowls, eggs, fruits, vegetables and other articles of diet in abundance for the stricken men.[24] After having carried off three thousand soldiers and one thousand five hundred sailors, the epidemic abated towards the beginning of February when the displaced inhabitants of Birkirkara were once more allowed to return to their homes.

---

[21] Bosio, J., *op. cit.*, p. 231.

[22] *Ibid.*, p. 415.

[23] Baudoin, J., *op. cit.*, p. 368.

Similar difficulties occurred on the 11th April of the same year when a number of the Order's ships returned to Malta from the Tripoli expedition loaded with such great numbers of sick and wounded men that the infirmary proved incapable of accommodating them. To give them the necessary shelter and care a temporary hospital was set up at Senglea where, in spite of the care with which they were nursed and treated, many of them lost their lives.[25] The story of the greatest crisis of all which arose during the siege of Malta of 1565 will be told in a later chapter.

With the passage of years the knights became fully aware of the need for providing a larger hospital. In its sitting of November 1574 the Chapter General ordered the building of a bigger infirmary in the new city of Valletta. When the Valletta Infirmary was eventually opened in 1575 the Birgu hospital was closed down. That, however, was not the end of its story, for seventeen years later it was reopened as an isolation hospital during the plague epidemic of 1592. In 1598 it was again used as a lazaretto but only for a few weeks; it housed sixteen sailors belonging to the crew of a Venetian ship who were suspected of being infected with plague.[26] In the opening years of the seventeenth century it gave shelter to a number of old people evacuated from Gozo following rumours of a Turkish invasion which, however, never materialised.[27] In 1643 the nuns of St. Scolastica petitioned the Grandmaster to allow them to exchange their own convent, which had become too small for their numerous community, with the old infirmary. From this document it appears that the edifice was in a dilapidated state and that it was being used as a magazine for the storage of biscuits and other material.[28] The nuns' request was granted in November of the same year but they did not occupy the building until the 30th October 1652 and they continue in possession up to the present day.

HOSPITAL OF THE ITALIAN LANGUE

Apart from the Holy Infirmary there existed at Birgu a small hospital kept by the Italian Knights in their own auberge near Fort Sant' Angelo. The association of the Italian Langue with a hospital service dated from 1392 when their first hospital was founded at Rhodes by the Admiral Domenico d'Allemagna who endowed it with his wealth.

---

[24] Bosio, J., *op. cit.*, p. 415.

[25] *Ibid.*, p. 427.

[26] Parisi, P., *Aggiunta agli avvenimenti sopra la peste*, Palermo, 1603, pp. 169 and 178.

[27] Vassallo, G., *Storia di Malta*, Malta, 1854, p. 644.

[28] Archives 114, fol. 147t, Royal Malta Library.

The Italian auberge at Birgu was built between 1553–55. Remains of it still survive in St. Lawrence Street. It stood on the foreshore of Dockyard Creek near where the Victualling Yard now is. The hospital occupied a large hall of the auberge. The external façade of the ward corresponds to the wall marked by an effigy of the Saviour sculptured in bas-relief and surrounded by the inscription 'In te Domine speravi'. Adjacent to the auberge was the residence of the 'prud'homme' of the hospital.

The Italian knights maintained this hospital until the Convent left Birgu in 1571 for their new city of Valletta.[29]

---

[29] Darmanin Demajo, G., 'Storia dell'albergia della lingua d'Italia', *Archivio Storico di Malta*, 1929, i. 261.

CHAPTER 5

The Holy Infirmary at Valletta

STRUCTURE

THE original intention was to build the new hospital in the vicinity of the Order's Conventual Church of St. John at Valletta, but on more mature consideration the reigning Grandmaster Jean de la Cassière realised that the ringing of bells would be disturbing to the sick and so the new infirmary was eventually erected at an appreciable distance from this church. The site selected was at the south-eastern side of Valletta, facing St. Lazarus Curtain at the entrance of the Grand Harbour. Many years later this situation was condemned because it exposed the hospital to the damp hot south-east winds which have a depressing and enervating effect not only upon the sick but also upon healthy persons. It was cut off from the cooler and more invigorating north winds by the nearby walls of Fort St. Elmo. In considering these defects, however, it must be borne in mind that at the time the hospital was built the prevailing view was that winds blowing from across the sea were harmful; hence the choice of the site of the hospital. This opinion explains, too, why the widely spaced windows were placed high up on the walls and why they were kept closed most of the time.

The building is a massive but unpretentious structure bearing a strong resemblance in its layout to the Santo Spirito Hospital of Rome. Its architect is unknown but certain features of its exterior call to mind similar designs by Girolamo Cassar, the Maltese architect, of Valletta.[1] It was started, under the title of the Holy Trinity, in 1574 and consisted originally of one long ward, with a ceiling of timber which subsequently came to be known as the Old Ward.[2] It was enlarged during the rule of Grandmaster Hughes de Loubenx Verdalle in 1583 by the addition of a new block. In December 1660 the Grandmaster and Council unanimously decreed the extension of the building[3] which was considerably remodelled in 1662,[4] the two Grandmasters Raphael and Nicholas Cottoner prolonging the length of the Old Ward to over 500 feet, the new extension

[1] Hughes, Q., *The Building of Malta, 1530–1795*, London, 1956, p. 153.

[2] Mifsud, A., *Knights Hospitallers of the Venerable Tongue of England in Malta*, Malta, 1916, p. 138.

[3] Archives 121, fols. 158t and 164, Royal Malta Library.

[4] Manuscript 279, vol. 2, fol. 831, Royal Malta Library.

being known as the 'Great Ward'. At the back of this hall there was an aperture through which foundlings were deposited inside the hospital by means of a revolving basket or cot called '*ruota*' (Italian for 'wheel').

In May 1679 a room was built for the reception of patients suffering from contagious diseases.[5] A hall to house the hospital library was erected in 1687. Other structural alterations and additions were carried out in 1712 during the time of Grandmaster Ramon Perellos y Roccafull. These comprised the erection of the Upper Quadrangle and the front facing Merchants Street, the pharmacy, quarters for the Resident Medical Officers and the chapel dedicated to the Holy Sacrament from where the Viaticum was conveyed to moribund patients. This new part was called the New Infirmary. Some more rooms were added in 1780.

The final plan was as follows. A quadrangular court (90 by 88 feet) was surrounded by buildings on all four sides. These buildings included the pharmacy, the library and the Medical Officers' quarters. A stone fountain decorated with the heraldic arms of Grandmaster Perellos—a pear design—stood in the centre of this court. From one corner of the quadrangle a flight of steps ran up to an upper ward where the coats-of-arms of the Hospitallers were emblazoned.[6] Another staircase descended to a corridor which led into a second quadrangle that was larger than the first one (being 130 by 84 feet) but was at a lower level (35 feet below it). Between these two courts was a smaller one of a triangular shape enclosed by a range of small rooms. The hospital communicated with the seashore in the Grand Harbour by means of an underground passage. Through this tunnel the sick and wounded landed from the galleys were promptly carried into the infirmary thus avoiding a long and uncomfortable detour through the streets of the city.[7]

A laundry and linen store, called 'La Lingerie' was erected across Merchants Street opposite the hospital in 1593. The site is now occupied by a block of flats known as the 'Camerata'. The hospital had its own cemetery near at hand. This burial ground has long disappeared. It stood in front of the main portal of the infirmary across North Street.

The number and distribution of the wards, which became more or less fixed by 1725, hardly underwent any change until the end of the Order's stay in Malta in 1798. The Old Ward and the Great Ward, in spite of their different names, formed in reality one vast hall, the demarcation between the two being indicated by two altars placed back to back in the middle of the hall. Together the two wards measured 503 feet in length, 34 feet 10 inches in width and 30 feet 6 inches in height, this huge hall being reputed to be one of the largest in Europe at the time. The floor was paved with neat stone slabs and the ceiling was made of wood.

---

[5] Manuscripts 279, vol. 2, fols. 833 and 835, Royal Malta Library.

[6] Bedford, W. K. R., *The Regulations of the Old Hospital of the Knights of St. John at Valletta*, London, 1882, p. xi.

[7] Bedford, W. K. R., *The Order of the Hospital of St. John of Jerusalem*, London, 1902, p. 88.

A row of windows on the side bordering on St. Lazarus Curtain served to provide light and air. All down the walls were small niches, one to every two beds, which were used as latrines and as dressing rooms for the patients. In winter the bare walls of these wards were covered with 131 large pieces of woollen tapestry to impart a feeling of snugness to that vast interior. These tapestries were removed in summer and replaced by a set of 85 paintings by Mattia Preti depicting episodes from the history of the Order. These two wards (containing eighty-six beds) were reserved for civilians and for pilgrims suffering from medical complaints. Most of them were fever cases, the acute ones being ranged along the right side of the wards and the chronic patients along the opposite side.

Medical patients who were members of the Order were treated separately in the Knights' Ward (nineteen beds in 1787). The New Ward, of twenty-one beds, housed the sick suffering from the flux or dysentery. Civilian surgical patients were accommodated in the Ward for the Wounded (twenty beds) and a few adjoining rooms. In 1669 the Treasury had projected an increase in the accommodation for wounded knights by the construction of six rooms[8] but by the first quarter of the eighteenth century the knights with surgical diseases had only two chambers all to themselves. Two lithotomy wards were reserved exclusively for patients operated on for vesical calculi or stones. The '*palombara*' (literally the 'dove-cote') consisted of a number of small rooms where twenty-nine patients with smallpox, scabies and other contagious diseases were isolated.[9] The need for separate rooms for such cases had been voiced by the Order's Council at its sitting of the 22nd May 1679.[10]

Venereal patients and others suffering from skin affections were treated in a small building at the back of the Great Ward known as '*la falanga*'. The accommodation consisted of two wards for those undergoing mercurial inunctions and of a room for patients taking the hot baths for syphilis. These rooms were isolated from the rest of the infirmary to prevent their 'bad air' from reaching the adjoining wards.

Moribund persons from the various wards were taken to the Small Ward or '*saletta*' in order that they might be adequately assisted in the last moments 'on which eternity depends'.[11] Here they received Extreme Unction and were attended, day and night, by the infirmary chaplains. This ward opened at right angles to the junction of the Old and the Great Wards opposite the two altars already mentioned so that the patients could follow the Mass and other church services from their beds.

Exposed children or foundlings were kept in a room next to the kitchen in the basement of the hospital adjoining the Great Magazine where they were seen by John Howard in 1786. He referred to this arrangement as the Foundling Hospital.[12] The foundlings were only kept here until they were farmed out to foster-mothers.

---

[8] Archives 645, fol. 77, Royal Malta Library.

[9] Archives 262, fol. 97, Royal Malta Library.

[10] *Ibid.*, fols. 86t and 141, Royal Malta Library.

[11] *Ibid.*, fol. 85t, Royal Malta Library.

Galley slaves and '*bonavoglie*' were nursed in the so-called Great Magazine (109 beds) which ran below ground level beneath the whole length of the Old Ward and the Great Ward. Two other Magazine Wards (thirty-six beds) were probably used for the same class of persons. To prevent the slaves escaping, windows in these basement wards were very few with the result that their light and ventilation left much to be desired; but in those days the provision of light and air had not yet assumed the great importance in the treatment of the sick that we now attach to them. Convicts had their own ward (St. Joseph Ward).

From one to two rooms were reserved for the reception of mental patients (eighteen beds) but in 1779 cases of mental illness were also being looked after in one of the magazines; however, as they were disturbing the other patients they were recommended for transfer to another magazine which up to that time had been used for the storage of firewood.[13]

The sick who did not profess the Christian religion were accommodated in a few rooms adjoining, but not communicating with, the infirmary. By 1758 a separate ward was put aside solely for British sailors, whose ships had been allowed to make use of Malta's harbours since the time of Charles II.[14]

It is evident from this description of the various wards that in spite of the social distinctions that influenced the housing of patients an attempt was made to classify the sick according to the nature of their illness. It is noteworthy that such a classification did not receive serious consideration in many of the hospitals of Europe of the time. With few exceptions, such as Pisa and Florence, these distinctions were not observed in the best hospitals of Italy where even the separation of medical from surgical cases was not adhered to.[15]

Every ward was provided with an altar. That of the Great Ward was dedicated to the Holy Trinity, of the New Ward to Our Lady of Mount Carmel and of the Ward for the Wounded to Saints Cosmas and Damian. The other wards had altars dedicated to St. Joseph, The Finding of the Cross and St. John the Baptist.[16]

The number of beds varied at different periods of the hospital's history. Towards the closing years of the eighteenth century (1787–89) there were no less than 554 single beds. This number could be increased to 900 in emergency.[17] Three hundred and seventy of them were provided with canopies or curtains and woollen mattresses. The canopies were of various hues—green, blue, red and yellow—and must have lent quite a cheerful touch of colour to the otherwise sombre interior of the wards. They were only hung during the winter, white linen curtains being substituted in summer.

---

[12] Howard, J., *An Account of the Principal Lazarettos in Europe*, London, 1789, p. 60.

[13] Archives 160, fol. 232t, Royal Malta Library.

[14] Mifsud, A., *op. cit.*, pp. 250 and 275.

[15] Fedeli, C., *L'Ordine di Malta e le Scienze Mediche*, Pisa, 1913, p. 10.

[16] Ferres, A., *Memorie dell'Inclito Ordine Gerosolimitano*, Malta, 1881, p. 194.

[17] Archives 6408 G, no pagination, Royal Malta Library.

In the sixteenth century the provision of single beds in hospitals, which to-day we take for granted, was still a luxury for in most continental hospitals, even as late as the eighteenth century, the patients lay two or three in one bed. The famous Hôtel-Dieu of Paris, for instance, contained 303 beds in 1515, each being 6 feet long and 4 feet wide. These beds usually accommodated two patients, while as many as twelve had been recorded. As there was insufficient room for them all, it was the practice for some of the sick to relieve one another by leaving the bed and resting on a bench while waiting their turn to lie down in bed again. In times of stress patients were even placed over the wooden roof of the four-posters as happened in 1752 when over 4,000 sick were received into the Hôtel-Dieu. These conditions prevailed until 1781 when Louis XVI forbade more than two sick being placed in each bed and ordered the separation of the patients by a division or compartment.[18] Such a state of affairs was never seen in the Order's hospital of Valletta where single iron beds were exclusively used since its foundation. These beds were changed from time to time, while those used by consumptives were burned with all their bedding. To appreciate the significance of this measure it must be borne in mind that these precautions were being taken long before the infectious character of this disease had been definitely established. All the beds were made every evening, the sheets being changed according to the needs of the sick even though several changes were required during the day. The knights had sheets of a finer quality than the laity and pilgrims while the coarsest linen was supplied to the slaves. The same distinction in the quality of the material was made as regards the coverlets which were coloured like the canopies. When sheets and blankets became unserviceable they were distributed to the poor.

ADMINISTRATION

New hospital regulations to replace those of 1588, which have already been considered in connection with the Holy Infirmary of Birgu, were not issued until the third decade of the seventeenth century although a commission had been appointed by the Grandmaster in February 1621 to inquire into 'the many and various usurpations' and 'abuses' committed by the infirmary officials.[19] The old regulations were finally revised by the Venerable Council on the 1st June 1629 and confirmed by the Chapter General of the Order which met on the 14th May 1631

[18] Nightingale, F., *Notes on Hospitals*, London, 1863, p. 23.

[19] Archives 93, fol. 48, Royal Malta Library.

during the Grandmastership of Antoine de Paule. These regulations contained no substantial departures from those of 1588 but special stress was laid on the need for a stricter control over the financial side of the administration. Economy, however, was not to be effected at the expense of efficiency. In fact the comptrollers were enjoined to treat the sick with 'charity and liberality and nothing be neglected that can be serviceable either to the soul or body'.[20]

Besides the two comptrollers in charge of the accounts of the infirmary, two Commissary Visitors were appointed as an additional safeguard, to keep a check on the supply of food and drugs for the patients. The comptrollers were knights administratively responsible to the Treasury. Two other commissaries chosen from among the members of the Venerable Council were deputed by the Grandmaster and Council to visit the infirmary every three months and acquaint themselves with the manner in which it was being run. They submitted reports to the Grandmaster who was empowered to amend or abolish existing regulations and to make new ones to correct abuses and to ensure the better conduct of the affairs of the hospital.

The Treasury officials had orders to keep a close watch on the pharmacy accounts submitted by the hospital apothecary. Up to September 1743 the purchase of drugs was made by tender, but as the quality of the drugs was not always satisfactory the Council initiated the policy of buying them directly from Messina and transporting them on the Order's ships.[21] The practice, which had become very common, of 'taking physick' as a preventive was abolished as it entailed a heavy charge on the Common Treasury; however, a man well versed in the practice of 'physick' was retained on the hospital staff for the carrying out of treatment under the direction of the physicians.

New provisions for the better discipline of the medical staff were introduced and old rules were amplified and rendered more explicit. When prescribing medicines physicians and surgeons were not allowed the use of abbreviations and ciphers. They were also required to write the date on the prescription. Two physicians and surgeons were ordered to sleep in the infirmary at night without fail. The physician beginning his month of service in the hospital had to visit the wards three days before actually starting his duties for the handing over of the patients by the out-going doctor. Having finished his turn of service at the hospital he had to visit the knights who were sick in their quarters, the nuns of St. Ursula and the Capuchin Friars, the sick poor in their homes and the slave prison as often as necessary. All physicians and surgeons were obliged to meet once a week in the infirmary to hold clinical discussions on their cases and to consult one another regarding the line of treatment to be followed. Failure to attend these meetings was punished by a deduction from their salaries.[22]

---

[20] Vertot (Abbé de), *The History of the Knights of Malta*, London, 1728, vol. ii, p. 137.

[21] Darmanin Demajo, Documents quoting 'Zecca ed economia del convento, fols. 252–4, Archivio Cattedrale'.

The Grand Hospitaller remained the supreme head of the infirmary, the most privileged officer of the Order. Only he could enter the hospital uninvited. The Grand Marshal who commanded the land forces of the Island was allowed in only after having deposited his staff of office at its portal.[23] With the passage of years the Grand Hospitaller grew even more jealous of his prerogative, so much so that not even the Inquisitor was permitted to set foot inside the infirmary without first obtaining permission. To ensure that this prelate did not trespass on the hospital, a few rooms with an entrance on the Merchants Street side were set apart for himself and his staff when they had to visit heretical and apostate patients who desired to reconcile themselves with their former faith. In this manner the ingress of the Inquisitor into the infirmary proper was avoided, but in 1709 he became aware of this stratagem and he protested to the Holy See. Following instructions from Rome the external door on the Merchant Street front was walled up but the hospital authorities continued to resist the inroads of the Inquisitor. An attempt was made by his officials in 1711 to gain admission into the infirmary in the company of the Captain of the Holy Office who held his rod raised as a sign of his jurisdictional powers. They were, however, met by the officers of the hospital and unceremoniously thrown out.[24]

Another review and modification of the hospital regulations was carried out in 1725.[25] The lay administrative staff was increased. The comptrollers were assisted by a resident secretary and a resident steward known as the 'Clerk of the Habit' who recorded the expenses of the infirmary in a ledger which was submitted for auditing to the Common Treasury every year. The comptrollers were made responsible, among other things, for the good maintenance and safe keeping of the surgical instruments.[26]

The Armourer was a servant-at-arms who was responsible for the safe keeping and cleanliness of the hospital's silver plate. Silver was not used from a motive of ostentation but because of the ease with which it could be cleaned; for this reason, too, the utensils were of plain workmanship.[27] From a list published in 1725 the silver plate consisted of 250 bowls, 356 plates, 167 cups and 256 spoons. Forks were somewhat rare, there being only ten. That this quantity of plate was insufficient for the needs of the hospital population had been recognised as early as 1679 when to make up for the deficiency plate of pewter was issued to replace the 'loss' of

[22] Vertot (Abbé de), *op. cit.*, p. 137.

[23] *Ibid.*, p. 107.

[24] Mifsud, A., 'L'espulsione dei Gesuiti da Malta nel 1763 e le loro temporalità', *Archivum Melitense*, 1914, ii. 160. Vertot (Abbé de), *op. cit.*, p. 107.

[25] *Notizia della Sacra Infermeria e della carica delli Commissarj delle Povere Inferme*, Rome, 1725.

[26] Archives 309, fol. 166, Royal Malta Library.

[27] De Boisgelin, L., *Ancient and Modern Malta*, London, 1805, vol. ii, p. 38.

the silver utensils.[28] Each silver piece was marked with the crest of Fra Don Giovanni de Villaragut, an Aragonese knight, who in the fifteenth century had endowed the hospital with a yearly income for the provision of silver utensils. Slaves were supplied with pewter vessels.

Hospital equipment and the linen were marked with the seal of the infirmary[29] and deposited with the '*linciere*', who saw that the bedding was changed, washed and mended as necessary. Unserviceable linen was turned into bandages and dressings or used to shroud corpses.[30] Laundry work and mattress making were carried out by slaves who also did the menial tasks of the hospital.

The store-keeper or '*bottigliere*' supplied the wards with bread, wine, oil and other foodstuffs in accordance with the vouchers issued by the 'prud'hommes'. All food was inspected by these officials before it was delivered to the kitchen for cooking. As regards the quality of the food only the 'best of everything' was good enough for the sick. They had soups of chicken, herbs and rice; pigeons, beef, veal, game and minced meat were served in such quantities as were necessary. Eggs and milk, raisins, cakes, sweets and fruits were also provided. Where the supply of food was concerned the infirmary claimed priority. Only after the needs of the hospital had been satisfied was the corn and fruit allowed to be consumed by the general population and the knights. This rule was never disregarded, not even when the knights and the inhabitants were on the verge of starvation. In fact during the famine that visited the Island in the time of Grandmaster Jean Paul Lascaris (1636–57) the knights went begging from door to door to collect the food needed for the patients at the infirmary.[31]

Food was issued twice daily. It was served by the knights and novices who waited upon the sick at meal times. Periodically the Grandmaster himself visited the infirmary when he donned an apron and personally distributed the food to the patients.[32] Ice was an important item of diet. During the summer it was regarded as 'one of the first necessaries of life' and in the form of iced beverages it was sought after particularly in hot weather for these drinks 'revive the spirits, strengthen the body and assist digestion'. Ice was imported from Sicily by many private individuals and a customs duty was levied on it in favour of the infirmary. When it became scarce all the supplies deposited in the ice-houses were entirely reserved for the use of the hospital even in preference to the owner himself.[33]

In 1725 the medical and nursing personnel was reorganised as follows: (a) three resident principal physicians who did duty, in turn, every month;

---

[28] Archives 262, fol. 97t, Royal Malta Library.

[29] Archives 309, fol. 74, Royal Malta Library.

[30] Archives 1714, fol. 19, Royal Malta Library.

[31] Vassallo, G. A., *Storia di Malta*, Malta, 1854, p. 674.

[32] Porter, W., *The Knights of Malta*, London, 1884, p. 302.

[33] De Boisgelin, L., *op. cit.*, p. 119.

(b) three resident junior physicians; each of them was on duty on alternate months but he was not relieved until fourteen days after the principal physicians had entered into residence so that when it was the other assistant's turn to go on duty he was in a position to acquaint him with the condition of each patient; (c) three resident principal surgeons to attend to the wounded and to perform lithotomy and cataract extraction; they were assisted by two junior surgeons ('*prattici*'), six barber-surgeons ('*barberotti*') and a phlebotomist who was helped by two young assistants in the application of leeches, cataplasms and vesicants; (d) an 'experienced elderly woman' for the treatment of ringworm of the scalp; (e) a chief pharmacist who was assisted by five apprentices ('*lavoranti*') and was responsible for the management of the dispensary;[34] two of his assistants were known as Reader of Prescriptions ('*lettore delle ricette*') and Barber-surgeon of the Clysters ('*barberotto dei clisteri*');[35] (f) fourteen servants or wardens ('*servi*' and '*guardiani*') who performed nursing duties and of whom two attended sick knights exclusively.

As the Order of St. John of Jerusalem was first and foremost a religious institution the care of the souls was as important in the hospital organisation as that of the body. Catholics were obliged to confess and receive Holy Communion before they were assigned a bed.[36] This practice was in conformity with the provisions prescribed by the Lateran Council of 1215 held under Pope Innocent III. It must also be remembered that in those days disease was regarded as being the product of sin and it was, therefore, natural that the first principle of care was to atone for sins committed and to enter into a state of grace before resorting to medication. Every opportunity of converting to the Catholic Faith the Jews, Moslems and Protestants that found refuge and help in the infirmary was seized upon. This spiritual mission assumed such importance that non-Catholics were not allowed to remain in the Great Ward for more than three days if they refused to receive religious instruction from the hospital chaplains.[37] Apart from his removal from the Great Ward, however, the patient who declined to change his religious views suffered no other hardship. Even renegades were charitably received. In August 1709, for instance, two apostate Christians—an Italian Catholic and an English Protestant—were retained and treated in a room attached to the infirmary in accordance with the instructions of the Order's Council in spite of the fact that the two patients had abandoned their faith.[38] That one's religious creed was no bar to treatment at the infirmary is shown by the statement that 'the Mussulman himself, in the last moments of his existence, was equally permitted to consult the book of his prophet; and those of that sect were allowed the free use of an enclosure which was as much respected as if it were situated in the mosques at Mecca and Medina'.[39]

---

[34] Manuscript 279, vol. 2, fol. 822, Royal Malta Library.

[35] Archives 272, fol. 202t, Royal Malta Library.

[36] Manuscript 377, fol. 151, Royal Malta Library.

[37] Anonymous, *Nouvelle relation du voyage et description exacte de l'isle de Malte*, Paris, 1679, p. 125.

[38] Archives 265, fol. 229, Royal Malta Library.

When Count George Albert of Erbach was received as a patient in the infirmary in 1617 he was informed of the hospital rule which laid down that the sick were obliged to make their confession and to receive Holy Communion within twenty-four hours of their admission. Being a non-Catholic the Count was naturally 'debarred from this blessing' but when he showed himself ready to confess himself to a 'priest of the Gospel', the knight attending him smiled kindly upon him with the words 'Beati qui lugent, quoniam ipsi consolabuntur'. The Count not only was not discriminated against because of his faith but was maintained at the expense of the Grandmaster.[40] Adherents of the Greek church had their own priest who received an allowance from the Order for the spiritual assistance he tendered to his co-religionists. During the last decades of the eighteenth century an English priest was available for the instruction of English Protestant patients who had formed '*l'heureux dessin d'y abjurer leurs erreurs*'.[41]

Religious services, attendance on the dying and funeral arrangements were performed by the Prior assisted by a Vice-Prior. The jurisdiction of the Prior corresponded to that of Parish Priest. The Vice-Prior was required to be Maltese since the majority of the patients spoke only the Maltese language. These two ecclesiastics were helped by eight Chaplains of Obedience and a sacristan who had to inform the Prior whenever the Last Sacraments were ordered by the doctor. A short evening service was held daily in the Great Ward during which the sick were exhorted to pray for their benefactors and for the souls of the departed. Every Sunday, then, from Low Sunday to Ascension the Grandmaster with his Grand Crosses and knights, followed by the Chapter of the Coventual Church, went in processional to the infirmary to pray and to sing the Gospel at its high altar in order to stir the knights to deeds of mercy and hospitality. Each year the ceremony of the Last Supper was held on Holy Thursday.[42]

The right of sanctuary originally bestowed on the Birgu Holy Infirmary was transferred to the Valletta hospital. However, this privilege became very restricted with the passage of time, many of the more serious crimes being excluded from the infirmary's protection. Apart from the sick and fugitives from justice, the infirmary also gave hospitality to pilgrims going to the Holy Land who were provided with food and lodgings until they were able to secure a passage to the Levant.[43] A number of beds, usually not more than fifty, were reserved for sailors and soldiers invalided out of the navy and army, for the shipyard workers and for other persons who deserved well of the Order. Convalescent patients were taken out of hospital for walks along the bastions wearing the infirmary dress and redingote. They were not allowed, however, to go into the town and two guards were posted near the hospital to ensure adherence to this rule. Indigent patients who, on leaving hospital, were in need of 'a change of air' to recuperate their health were granted financial aid to enable them to spend from two to three months in the countryside either in Malta or in Gozo.[44]

---

[39] De Boisgelin, L., *op. cit.*, p. 171.

[40] Kraus, E., *The Adventures of Count George Albert of Erbach*, London, 1891, pp. 302, 316 and 320.

[41] Archives 1194, fols. 86 and 87, Royal Malta Library.

[42] Archives 309, fol. 75, Royal Malta Library.

[43] *Ibid.*, fol. 45t.

For the conveyance of patients to hospital two sedan-chairs were provided one of which was reserved exclusively for sick knights and priests. The chairmen were the hospital kitchen servants.[45] Patients were admitted into the infirmary through the door in Merchants Street. A strict vigilance over visitors was enforced. Female relatives were allowed to enter the infirmary to see their sick menfolk only after the nurses had pulled away the curtains surrounding the patient's bed so that both patient and woman were in full view. The visit was not to last for more than an hour. Prostitutes were debarred from setting foot in the infirmary; dogs, too, were banned 'even when following the knights'.[46] No one was allowed to open taverns or grocery shops in the vicinity of the hospital while all articles of food brought by visitors were inspected by the physicians before they were handed over to the patients.[47]

The hospital regulations were reviewed and amended by the Chapter General of 1776–77 during the Grandmastership of Emmanuel de Rohan. Tighter measures of control over expenditure were enforced while the routine administrative duties of the higher officials were laid down in greater detail.[48] The title of Infirmarian was changed to that of 'Commendatore dell'infermeria' but he remained the effective head of the hospital responsible to the Grand Hospitaller. Among his other duties it was incumbent on him to visit the patients daily at sunrise and at sunset to comfort them and to enquire of them whether they had been given the medicines prescribed for them by the medical staff and whether they had had a change of bed linen.[49]

Towards the close of the eighteenth century the number of admissions was almost four thousand a year, the death rate being eight per cent.[50] The cost of each patient was about seven to nine pence a day, the expense of the infirmary and the Women's Hospital amounting to nearly ten thousand pounds annually.[51]

---

[44] Archives 1714, fol. 31, Royal Malta Library.

[45] Archives 309, fol. 167t, Royal Malta Library.

[46] Archives 262, fol. 86t Royal Malta Library.

[47] Archives 1714, fol. 31, Royal Malta Library.

[48] Archives 309, fols. 162 and 220, Royal Malta Library.

[49] *Ibid.*, fol. 70.

[50] Archives 6498 G, no pagination, Royal Malta Library.

[51] Thornton, W. H., *Memoir on the Finances of Malta*, Malta, 1863, pp. 13 and 56.

VISITORS' IMPRESSIONS

A number of travellers who came to Malta while on a tour of the Mediterranean and the Levant have testified as to the laudable manner in which the infirmary was conducted during the heyday of the Order. In 1586 the German traveller Samuel Kiechel visited the hospital and was favourably impressed by what he saw.[52] One of the earliest English visitors to the Island was George Sandys, the son of the Archbishop of York. He was here in 1610 and after seeing the infirmary he declared that it 'doth merit regard, not only for the building but for the entertainment there given; for all that fall sick are admitted thereunto. The Knights themselves there lodge when hurt or diseased; where they have physick for the body and for the soul also (such as they give). The attendants many, the Beds over-spread with fair Canopies; every fortnight having change of Linen. Served they are by the junior Knights in silver; and every Friday by the Great Master accompanied with the Great Crosses.'[53]

The German Count George Albert of Erbach was captured by corsairs near the coast of Sicily and sold into slavery at Tunis. He was eventually ransomed through the intervention of the Grandmaster and brought to Malta in 1617. He was taken to the infirmary where he was nursed for a fortnight as he had not yet completely recovered from a serious illness contracted in the Moorish Bagno. 'The hospital', he says, 'called the "Infermeria" was situated in a large new building and presided over by the Regent of the French Knights, the Great Hospitaller, who had under him five doctors graduated in the medical college and three apothecaries. The tending of the sick was carried out by knights and servants from time to time deputed for this service. . . . Every bed had its special covering on which was worked the cross of the Order and at the head was a board on which the doctor's directions for the patient's food were inscribed. . . . Any slovenliness (on the part of the hospital staff) was met with severe punishment.' The hospital rules governing the conduct of patients were read out to the Count. He was told that he could eat nothing without the doctor's order, that he could while away the time with games except dice, cards and chess; he could read history but not aloud so as not to disturb fellow patients. Disregard of these rules implied his discharge from hospital.[54]

On his way from Egypt the Frenchman Cóppin passed through Malta in 1639. He spoke of the infirmary as being one of the finest buildings in Valletta.[55] The English naturalist and Cambridge tutor, John Ray, was likewise much impressed by the hospital in 1664. His companion, Sir Philip Skippon, wrote that every sick person had two beds for change when there was need and a closet to dress and undress in and answer the calls of nature.[56] Monsieur de Thevenot, in his account of a voyage to the Levant published in 1665, states that he found the hospital 'fort bien basti, la salle pour les Chevaliers malades est tapissée de haute lisse . . . Tous les malades sont receus a cet Hospital & fort bein traitez . . .'.[57] Another French traveller, who wrote anonymously, qualified the infirmary in 1673 as 'one of the most beautiful in the world'. He found the sick classified and kept separate from one another according to the nature of their illness.[58]

---

[52] Dessoulavy, C. L., 'Visitors to Malta from the 15th to the 18th Century', *The Sundial*, 1943, iv. 99.

[53] Sandys, G., *Sandys Travels*, London, 1673, p. 183.

[54] Kraus, E., *op. cit.*, p. 302.

[55] Dessoulavy, C. L., *op. cit.* 101

The Rev. Henry Teonge who was in Malta in 1675 wrote that the hospital was 'so Broade that 12 men may with ease walk a breast up the midst of it; and the beds are on each syd, standing on four yron pillars with white curtens and vollands and covering extremely neate, and kept cleane and sweet; the sick served all in sylver plate'.[59] The following year a London merchant, named Edward Brown, spoke of the infirmary as being 'the very Glory of Malta. Here the sick are provided for much better than they could be in their own Houses . . . every patient having two beds for change and a Closet with a Lock and Key to himself. . . . Such exact Order being observed and every Thing being performed with such Magnificence as surprizes Strangers and gives them a high Idea of the Charity of this illustrious Order.'[60]

Sieur du Mont described the infirmary in 1690 as being a 'magnificent hospital' where the sick are 'serv'd by the Knights when they Eat or Drink. . . . The Vessels are generally of Silver; the Beds are good and the Linen is Chang'd pretty often. And besides, the diseas'd are so plentifully furnished with all things that are proper for their Entertainment and Cure that the Knights themselves scruple not to lodge here when they are sick.'[61] His compatriot, Comte de St. Priest, was no less struck by the spacious halls and the lavish hospitality given to the sick of all nations and creeds when he saw the hospital one hundred years later.[62]

The change that occurred in the political, moral and economic ideas of Europe towards the end of the eighteenth century reduced the usefulness of the Order of St. John of Jerusalem to a mere shadow of its former self. The Turkish naval might was no longer the formidable power that it had been in the past. The Order's fleet had dwindled to a few vessels and the mastery of the Mediterranean Sea was passing into the hands of the French and the British navies. France and Venice had established friendly relations with the Turks and they prohibited the Order's navy from attacking the Ottoman shipping on which the knights had preyed for centuries for the enrichment of their coffers. As the Turk became respectable in the eyes of Christian nations, the necessity for the retention of the Order of St. John as a military and naval organisation was no longer felt. It is understandable, therefore, why the three hundred knights who lived in Malta at the turn of the century were leading a life of idleness.[63]

---

[56] Dessoulavy, C. L., *op cit.*, p. 102.

[57] De Thevenot, *Relation d'un Voyage fait au Levant*, Paris, 1665, p. 11.

[58] Anonymous, *Nouvelle relation du voyage et description exacte de l'isle de Malte*, Paris, 1679, p. 125.

[59] Teonge, H., *The Diary of Henry Teonge*, London, 1825, p. 47.

[60] Brown, E., *The Travels and Adventures of Edward Brown*, London, 1739, p. 176.

[61] Sieur Du Mont, *A New Voyage to the Levant*, London, 1696, p. 130.

[62] Guignard, F. E., *Malte par un Voyageur François*, no place of publication, 1791, p. 92.

In 1777 the amalgamation of the Order of St. John with the Antonine Hospitallers (an order of chivalry founded in 1095 for the relief of sufferers from St. Anthony's Fire) added to the financial burdens of the Order, which received a far graver blow in 1792 when the French Convention abolished the Order in the territory of Republican France and confiscated its property. All these circumstances resulted in the economic ruin of the Order whose revenues fell from over £136,000 in 1788 to £34,000 in 1798. This sum proved altogether inadequate to meet the heavy charges of the various government departments. The infirmary alone cost the Order £8,000 a year while the Women's Hospital absorbed another £2,000; in fact expenditure for the maintenance of the hospitals represented the principal item in the Order's budget at this period.[64] With the finances of the government in such a tangle it was inevitable that the hospital services should suffer. It is no wonder, therefore, that the infirmary was earning the strictures of the philanthropist John Howard, who was in Malta from the 29th March to the 19th April 1786. He found that the patients still had single beds but these 'were all so dirty and offensive as to create the necessity of perfuming them; and yet I observed that the physician in going his rounds was obliged to keep his handkerchief to his face. The use of perfume I always reckon a proof of inattention to cleanliness and airiness; and the inattention struck one forcibly on opening some of the private closets with which this hall is very properly furnished. . . . The slow hospital fever (the inevitable consequence of closeness, uncleanliness and dirt) prevails here.'[65] It must not be imagined that the Holy Infirmary was the only hospital with which Howard found fault. Indeed he describes the rooms of the Middlesex Hospital in Marylebone as being 'close and dirty'; the beds of Guy's Hospital at Southwark as 'infested with bugs' and the wards of St. George's Hospital at Hyde Park Corner as 'very offensive, all the windows being shut'.[66]

The decadence of the Order was not limited to material affairs but involved also the moral sphere. It was inevitable that the infirmary should share in this deterioration. Indiscipline on the part of the nursing employees and of the resident medical and surgical staff was only surpassed by the negligent conduct of the ecclesiastical personnel attached to the hospital. This decline had definitely set in by 1765 when the Venerable Commission

[63] Hardman, W., *A History of Malta*, London, 1909, p. 2.

[64] *Ibid.*, p. 555.

[65] Howard, J., *op. cit.*, pp. 58–60.

[66] *Ibid.*, pp. 133, 135 and 136.

set up to report on the financial state of the infirmary found that the priests absented themselves from the hospital 'during the day and were not vigilant during the night so that, with horrible scandal, patients have died without spiritual assistance'.[67]

Howard was not the last visitor to record his impressions of the infirmary. Four years after him another English traveller, Sir Richard Colt Hoare, found that the hospital 'is a handsome edifice and the institution itself is noble and charitable. Two extensive galleries, besides smaller apartments, are destined for the reception of the sick who are treated with the utmost attention. A few devout, and perhaps penitent, Knights still observe the ancient custom of attending the sick in person which was one of the duties incumbent on the Order while it preserved its original spirit and character.'[68] These remarks lead one to believe that there was a change for the better in the management of the hospital following Howard's visit. What is beyond doubt is the fact that an attempt to reorganise the administrative system of the infirmary was actually made in 1796 when by a decree of the 21st April a body of knights was appointed to assume control of the affairs of the hospital. The new board, called the Venerable Congregation, was composed of the Grand Hospitaller or his deputy, two Grand Crosses or Lieutenants of Balis chosen from various langues and four knights selected by the Grandmaster and the Sacred Council. The main function of this Congregation was to ensure the strict observance of the regulations of the infirmary and to make recommendations to the government for the better running of the hospital. Meetings were to be held once weekly while one of the four knights paid a daily visit to the various departments of the hospital to acquaint himself with the real state of the institution. For the convenience of those who wished to submit written suggestions or complaints or to tender 'secret information' a letter-box with a slot on top was provided. It had two different locks the keys of which were kept by the Grand Hospitaller and by one of the Balis respectively. A copy of the revised regulations was deposited with the sexton who was to hand it to any employee who wished to consult it.[69]

That the Venerable Congregation took its task seriously is evident from the various and many amendments made in the regulations of the infirmary. Among the improvements envisaged they even contemplated the installation of a central heating plant to obviate the dangers and inconveniences of the coal fires with which the wards were heated.[70] What did not improve was the state of the finances of the Order which was compelled to sell part of the silver plate of the Grandmaster's Palace and of the navy and also the 'superfluous silver of the hospital' in November 1795.[71] In the following year more silver plate was melted to coin money as the Order was at this time unable to defray its expenses and had borrowed considerable sums from merchants in Malta.[72] These sad events were but the prelude to far more fluctuating fortunes in the life of the infirmary for the political and military storm that had been looming for some time over the Mediterranean horizon finally burst over Malta sweeping the knights away from the Island and with them the entire organisation and purpose of the infirmary. There is no doubt that many of the hospital arrangements were rough and its sanitary state crude but, as has been aptly said, 'they were equal in efficiency to what was usual at that period. . . . Men lived in those times a harder life and expected less in the way of comfort and luxury than now. They found in the Hospital of Malta certainly as much, and probably far more, care and attention than they would have received elsewhere.'[73]

---

[67] Archives 272, fol. 54, Royal Malta Library.

[68] Hoare, R. C., *A Classical Tour through Italy and Sicily*, London, 1819, vol. ii, p. 279.

[69] Archives 1714, fols. 1 and 43, Royal Malta Library.

[70] *Ibid.*, fol. 40.

[71] Archives 276, fol. 16, Royal Malta Library.

THE FRENCH PERIOD

In the radical and widespread upheaval of the social and economic life of the Island that followed its capture by the French on the 12th June 1798 and during the subsequent insurrection of the Maltese against the new masters, the infirmary played an important part. The French established their first hospital, for the three hundred sick troops taking part in the expedition, at Mdina on the very first day of the occupation of Malta;[74] but four days later they issued an order reserving the Holy Infirmary for the exclusive use of their troops. In accordance with this decree the infirmary was cleared of its civilian patients and converted into a military hospital, which it remained until the early years of the twentieth century.

The clinical direction of the 'Grand Hôpital', as the infirmary became officially known, was entrusted to a Dr. Robert who was appointed Physician-in-Chief. An inspection of the hospital convinced Robert that only the wards formerly used for surgical cases were fit for the accommodation of patients. He condemned the remaining wards as being unhealthy, adducing as evidence the fact that cases of acute fevers admitted into them degenerated into 'continuous' forms and these into 'putrid' ones. Apart from this, relapses were of frequent occurrence. The laboratory attached to the pharmacy was too small and the drug store too humid and dark. He found, however, that the hospital was well provided with water so that cleanliness was not difficult to maintain.

Robert caused various structural modifications to be carried out in the building with a view of improving its sanitation, ventilation and lighting. The pictures on the walls were removed and the bed canopies and curtains were also done away with. The venereal patients were evacuated from the '*falanga*' which was provided with large windows and ventilators and connected with the Great Ward for the reception of fever cases.[75] The administration was provisionally entrusted to four '*citoyens*' two of whom were Maltese physicians. They were enjoined to draw up an inventory of the hospital's silver, furniture and other equipment and to provide the infirmary with everything that was needed for the patients.[76] It was not long before the administrative machinery of the hospital began to show signs of weakness. There were five hundred patients by the end of July but not a single chemise was available.[77] The position had not improved a month later when the French civilian governor of the Island, Regnaud de St. Jean d'Angely, complained that apart from lack of clothing there was also a complete absence of drugs. The bulk of the hospital silver plate was melted to pay Napoleon's troops.[78] The insurrection of the Maltese against the French in September 1798 rendered the situation more critical. Speaking of the conditions of the hospital in April 1799, General Vaubois said: 'Nothing is more dreadful. The wards are dirty. The garden attached to it serves no useful purpose except perhaps for the gardeners who must be making a fortune out of it.'[79] He expressed his determination to put a stop to this mis-management and '*à faire des exemples*'.

---

[72] Eton, W., *Authentic Materials for a History of the Principality of Malta*, London, 1807, p. 72.

[73] Porter, W., *op. cit.*, p. 314.

[74] Scicluna, H. P., 'Documents Relating to the French Occupation of Malta in 1798–1800', *Archivum Melitense*, n.d., v. 129 and 142.

In June the rumour spread that the troops were shunning hospital treatment as no drugs were to be had. Vaubois hastened to contradict this rumour and to defend the medical staff in an order of the day of the 24th June 1799 in which he exhorted the soldiers to come to hospital as formerly, to cultivate personal hygiene by frequent baths and to eat vegetables to safeguard their health.[80] Owing to its scarcity, wine had become a very precious commodity in the Island and therefore it is not surprising to hear that abuses in its consumption were taking place in the hospital. A minute from Vaubois to the Ordonateur de Terre of the 9th October 1799 concerning the 'scandalous tasting of wine', accuses the official deputed to test the quality of the wine supplied to the hospital of consuming as much as eight pints of the liquor in the execution of his duty as wine-tester! Vaubois, while not contesting the official's right to sample the wine, maintained that only a very small quantity was needed for the purpose and he insisted that a limit be imposed on the tester's consumption.[81] After the 22nd December 1799 all the wine available in the territory occupied by the French was requisitioned for the hospital. A few months later quantities of wine were converted into vinegar which enjoyed a great reputation as an antiscorbutic.

When Robert first took over the clinical direction of the hospital there were only a few cases of 'acute fevers' and some 'gastric-bilious fevers' which occasionally passed into the 'putrid' form; however, almost all of them responded favourably to the use of iced-water. The only fatalities were from phthisis, the existence of which was ascribed to the climatic conditions of the Island.[82] With the initiation of the blockade and the approach of winter the clinical picture changed and took on a more serious complexion. Catarrhal and rheumatic diseases made their appearance but their importance was soon eclipsed by the results of starvation which was to prove a far more formidable enemy than the insurgents themselves. Vitamin deficiency became a scourge of the first magnitude. The earliest cases of scurvy began to manifest themselves towards the end of December 1799. The diarrhoea and dysentery which appeared at about the same time were probably also due to avitaminosis but they were ascribed to the consumption of unripe fruits and of 'badly oxygenated water' which had been stored in the cisterns for a long time and which the besieged were obliged to drink when the Wignacourt aqueduct, which supplied Valletta with water, was cut off by the insurgents. In October 1798 there were seven hundred patients in the hospital.[83] This number increased as the food supply diminished. By the end of November 1798 fresh food was no longer to be had, though forty-five oxen had been slaughtered some time earlier for the exclusive use of the hospital.

---

[75] Robert, *Mémoire sur la topographie physique et médicale de Malte*, Paris, 1802, p. 35.
[76] Scicluna, H. P., *op. cit.*, n.d., v. 196.
[77] Hardman, W., *op. cit.*, p. 92.
[78] Azzopardi, B., *Giornale della presa di Malta e Gozo*, 1864, p. 42.
[79] Hardman, W., *op. cit.*, p. 607.
[80] *Ibid.*, p. 612.
[81] *Ibid.*, p. 620.

As the siege wore on and the blockade became more stringent the French Government was obliged to issue salted meat to the hospital, but this stock had become almost exhausted by June 1799.[84] The sick were dying of fevers while venereal infections also claimed their victims. Before the insurrection these diseases had already assumed such proportions that one of the two monasteries of St. Scolastica was converted by the French into a venereal diseases hospital for their troops.[85] During the blockade Vaubois tried to check their spread by banishing from the towns all known prostitutes and sending them as 'a nice gift to the insurgents' in the countryside[86]— a very early instance of germ warfare! Besides, the Anglo-Bavarian Auberge on the platform of St. Lazarus Curtain was turned into a hospital for the treatment of venereal infections which it remained until the entrance of British troops into Valletta.[87]

Scurvy was the most formidable killer. It was known that this illness was due to the lack of green vegetables and fruits in the diet. The use of salted meat, humidity and cold were also believed to play an important part in its causation. The pathological changes of the disease were supposed to be produced by the 'humours' being driven into the interior of the body and by the suppression of perspiration. Robert has left a full description of the natural history of the disease as it manifested itself in Malta. He deals with the articular pains, the bleeding and spongy gums, the falling out of teeth and the swelling of joints and haemorrhages in the skin that afflicted his patients. He has also recorded the findings of the various post-mortem examinations carried out by him at the hospital.[88] His therapeutic efforts against the ravages of scurvy were on the lines recommended by Lind and consisted in the administration of lemon and orange juice. As long as these fruits were available not one single patient died of the disease but when they were no more to be had he could do nothing else but rely on measures which had no direct effect on the illness, such as the opening of additional windows to admit more air into the hospital, the frequent washing of ward floors, the administration of baths to stimulate sweating and emetics and purges. The final stages of the disease were pathetic to an extreme degree. 'The severity of their pains', says Robert, 'was unheard of and unbearable. Many times I have seen them shedding tears as they uttered piercing cries and invoked death. They presented a most sorrowful spectacle.'[89]

---

[82] Robert, *op. cit.*, p. 38.

[83] Hardman, W., *op. cit.*, p. 132.

[84] *Ibid.*, p. 214.

[85] Cutajar, F., *L'occupazione francese di Malta nel 1798*, Malta, 1933, p. 28.

[86] Ransijat, B., *Assedio e blocco di Malta*, Malta, 1843, p. 119.

[87] Darmanin Demajo, G., 'Note intorno alle ultime sedi della Lingua d'Inghilterra nell'Ordine di San Giovanni', *Archivio Storico di Malta*, 1936, vii. 229.

The situation was complicated by the appearance of another disorder. This was night blindness which started insidiously almost concurrently with scurvy, with which it was sometimes found associated in the same subject. It was not then known that this disease was due to a lack of vitamin A in the food though Robert was aware that it resulted from undernourishment. He attributed the impaired eyesight to a 'catarrh of the retina' whereby the sensitivity to light of this organ was reduced due to deficient rations. He tried to cure it by fumigations with the liver of animals and aromatic plants. He claimed to have obtained good results with this treatment but was forced to admit that the condition reappeared soon after treatment was suspended. Although not a fatal disease like scurvy it was a very disabling malady from the military point of view for those who suffered from it were unable to perform guard duties on the ramparts at night since they could not distinguish objects in the darkness.[90]

The clinical atmosphere of the hospital underwent a change in the months of July–September 1799. Patients with 'intermittent fevers' were now occupying the beds of those who had succumbed to scurvy. Phthisis was just as common but more fatal. The fevers usually responded to quinine but many of them degenerated into 'malignant forms' or changed from 'tertian' to 'double tertian', and prevailed until the end of the blockade in September 1800. Between June 1798 and September 1800, four thousand and forty-six fever cases were treated at the infirmary out of a garrison of six thousand men. Of these fever patients five hundred and twenty-five died; another three hundred died of scurvy while many others lost their lives through phthisis and diarrhoea. That the shortage of food was responsible for this high rate of mortality is not to be doubted. In fact during the first year of the blockade each patient received an average of only one ounce of beef or mutton per day; while during the second year the same meagre quantity of horse or ass-flesh was issued instead of beef and mutton. Rice, beans and fish were available but eggs were so rare and costly that when they could be obtained every egg had to be shared by several patients. During most of the year 1800 the hospital authorities had nothing to give their sick except beans.[91]

---

[88] Robert, *op. cit.*, p. 44.

[89] *ibid.*, p. 51.

[90] *Ibid.*, p. 57.

When the French finally surrendered in September 1800 they had to leave Malta within two days. The sick troops who were fit to travel were conveyed on board the ships and provided with the necessary medicines, surgical instruments and medical staff. Article 7 of the Capitulation also contained the following provision: 'The General-in-Chief having at Malta a physician and surgeon who will take care of them [i.e. those patients who could not be moved], they shall be furnished with quarters gratis if they should be moved from the hospital and sent to France as soon as their situation admits of it with everything that belongs to them in the same manner as the garrison. The Generals-in-Chief by land and sea in evacuating Malta entrust them to the generosity and humanity of the English general.'[92] Vaubois's faith in English generosity and humanity was well placed. The French patients were eventually transferred to Fort Manoel in charge of a French physician and surgeon and there they were cared for until they were sufficiently well to return to France.[93]

THE BRITISH RULE

The 'Grand Hôpital' was taken over by the British military authorities who had three hundred and fifty sick troops when they entered Valletta.[94] Henceforth it became known as the General Hospital but not all of the building was used as such. An English visitor to Malta thus described it in 1812: 'Since our occupation of Malta, it has been devoted to the use of the civil staff having seldom more than from thirty to forty patients and is superintended by the inspector of hospitals, garrison surgeon, apothecary to the forces and assistants. A medical depot has lately been formed there for the supply of our garrisons in Sicily and the Ionian islands. With a very slender hope of its ever being re-established on a footing like the former [i.e. at the time of the Order], we can only deplore the change which has reduced one of the most admirable institutions in Europe to a place of comparative insignificance.'[95] It is certain that only that section surrounding the upper quadrangle was functioning in 1821. The Great Hall had by then been converted into a rope-walk; the magazine ward into an apothecary store while other rooms were let out as stores to merchants. The former operation room was converted into a dining room for convalescents. Other parts were allowed to fall into ruins. The Merchants Street entrance was made the main gate. Round the upper courtyard, the pharmacy, the laboratory and the medical officers' quarters still occupied their old sites. The pharmacy was still stocked with its antique pots and jars some of which were reputed to have been brought from Rhodes by the knights. The laboratory was equipped with the apparatus needed for the distillation, expression of oil and preparation of ointments, decoctions, powders and extracts.

---

[91] Robert, *op. cit.*, p. 78.

[92] Hardman, W., *op. cit.*, p. 320.

[93] De Boisgelin, L., *op. cit.*, vol. ii, p. 244.

[94] Robert, *op. cit.*, p. 30.

[95] Blaquière, E., *Letters from the Mediterranean*, London, 1813, vol. ii, p. 297.

On the upper floor, surrounding the same courtyard, five wards and a surgery made up the regimental hospital of the corps quartered in Valletta. Another set of wards, entirely cut off from the rest and capable of accommodating eighty patients, was used as an opthalmic department for the entire garrison of the Island. The private closets built in the wall recesses were removed as they became a repository for filth and nuisances of all kinds; lavatories were constructed outside the wards to replace them.

Dr. J. Hennen, the Inspector of Military Hospitals, criticised the plan and site of the building which he found to be incompatible with its function as a hospital on account of its defective ventilation;[96] but the passage of forty years wrought no substantial changes in its internal arrangements beyond an increase in its bed complement to three hundred and eighty-two, so that the Barrack and Hospital Commission of 1863 had this to say about the hospital: 'This hospital is one of the most complicated buildings we have seen and one of the most ill-arranged and unsuitable places for the sick of a garrison in existence.... All healthy winds are cut off from the building partly by its construction, partly by its being enclosed on three sides by a densely packed neighbourhood of lofty houses.... One of the main town sewers, draining a considerable district, passes directly under the middle of the hospital, while other two of the town sewers pass one at either end. These sewers all open above water-mark and give rise to most offensive odours during certain states of weather.... The windows, small as they are, are all close to the roof so that there is nothing for the sick to look at, not even the sky, besides the dead walls and their sick comrades opposite.'[97] Even before its inspection by this commission, the hospital had been a source of complaint on the part of army medical officers but it had been estimated that the cost of the improvements called for would have exceeded the expense of a new building in a better position. Proposals were, in fact, made at this period to erect a new general military hospital. It was to be built in Valletta with its front facing St. Andrew Street and was planned on the pavilion system with accommodation for three hundred beds.[98] Eventually, however, the old hospital remained in use. Its defects were put right to a certain extent by the opening of new windows, the erection of a balcony facing the sea-front, the replacement of the stone floor by cement paving and the diversion of the sewers from its vicinity. The Great Ward was divided by partitions fifteen feet high.[99]

---

[96] Hennen, J., *Sketches of the Medical Topography of the Mediterranean*, London, 1830, pp. 570–75.

[97] Galton, D., and Sutherland, J., *Report of the Barrack and Hospital Improvement Commission on the Sanitary Condition and Improvement of the Mediterranean Stations*, London, 1863, p. 174.

The hospital had long passed its heyday but it was yet destined to leave an outstanding mark on the medical history of mankind. Though it is common knowledge that the micro-organism responsible for brucellosis was discovered by Sir David Bruce in Malta very few people realise that he announced his discovery to the medical world from the Station Hospital, Valletta, alias the old Holy Infirmary where he was working in 1887 as Army Surgeon.

The hospital continued in use until the opening of the Mtarfa Hospital in June 1920. The building then passed to the civil government and was turned into a Police Depot. In 1940, following the outbreak of the Second World War, the police were evacuated out of Valletta and for a time the old infirmary seemed to have no service to offer to the defenders. In the air-raid attacks that demolished large areas of Valletta the infirmary did not escape unscathed. It suffered at least four direct hits, the most maiming being that of May 1941 which destroyed the Infirmarian's Room that was decorated with the escutcheons of the various officials who had occupied that post during the time of the Order. Another missile crashed through the roof of the Great Ward penetrating through its floor into the underlying Magazine Ward. As the tempo of the air-war slowed down, a part of the building was converted into a 'Command Hall' for the entertainment of the troops. Other parts were used as temporary homes for families who had been rendered homeless by the bombing. When the war was over the Maltese Government turned a section of the Great Ward into a Children's Theatre under the name of Knights' Hall. It is sad to think that although the war came to an end as long ago as 1945, steps were taken only in 1960 to reconstruct and restore 'one of those rare monuments of universal benevolence which did honour to human nature'.[100]

---

[98] Nightingale, F., *op. cit.*, p. 104.

[99] Bedford, W. K. R., *The Order of the Hospital of St. John of Jerusalem*, London, 1902, p. 88. Sutherland, J., *Report on the Sanitary Condition of Malta and Gozo with reference to the Epidemic Cholera in the Year 1865*, London, 1867, p. 55.

[100] Blaquière, E., *op. cit.*, p. 296.

CHAPTER 6

Women's Hospitals

EARLY INSTITUTIONS

The earliest known hospital for women was Saint Peter's Hospital at Mdina (near Rabat) about which we know practically nothing beyond the fact that it was closed down in 1418, as has already been mentioned in a previous chapter.

Another hospital for women owed its origin to a hospice for pilgrims founded in the citadel of Gozo on the 22nd February 1454 by a certain Francesco Bonnici. He bequeathed some property to it for the maintenance of two beds but the institution was later enriched by other donations of which no records now survive as the relevant documents were lost during the Turkish invasion of Gozo of the 25th July 1551. There is no evidence as to the site of the original building; indeed there is some doubt as to whether such an edifice had been erected previous to the sixteenth century and it has been suggested that the proceeds from Bonnici's bequest were used to support a few sick persons who were nursed in private houses.[1] The first indication of the existence of a hospital building belongs to the year 1575 when Mgr. P. Duzzina visited the establishment during his apostolic visit to Gozo. It was then dedicated to Saint Julian but it was also known as the Hospital of St. John the Evangelist and of Saints Cosmas and Damian.[2] He describes it as consisting of a few dwellings near the gates of the citadel. He found, however, that instead of fulfilling its original purpose it was being used to house prisoners. He was informed that no patients were being admitted because there was no room for them and neither beds nor blankets. The income derived from the hospital property was being distributed as alms to the sick poor in their homes.

Mgr. Duzzina directed that the building should again revert to its former use as a hospital for destitute sick women. It is not known whether his directions were carried out at the time but it is certain that when Mgr. M. Molina visited the hospital in 1680 he found that no patients were being cared for in the institution. To remedy this abuse he ordered that patients should be received into the hospital and that the proceeds of the foundation should be employed for the care and treatment of the sick. He exhorted all Gozitans to support the institution to which he himself contributed out of his own purse. With the passage of time its income was augmented by various donations among which was that of Mgr. Prior Fra Melchior Alferan de Bussan, Grand Prior of the Conventual Church of Malta.

---

[1] Manuscript 389, no pagination, Royal Malta Library.

[2] Manuscript 384, no pagination, Royal Malta Library.

In 1746 the hospital was situated in the locality known as 'del magazeno' near the sacristy of the Collegiate Church.[3] In 1779 a decision was taken to build a better one at Rabat, near the citadel, as it was realised that its environs were quite unsuitable. The foundation stone of the new hospital was laid on the 3rd May 1783 by the bishop Mgr. V. Labini who contributed towards the cost of its construction and also bequeathed to it one-third of his property. The hospital was again given its ancient name of Saint Julian and when completed consisted of two wards with accommodation for fifty patients. It also received unmarried pregnant women who sought refuge under its roof at the approach of labour. It was, besides, provided with a 'ruota' for the reception of exposed babies who were not, however, kept in the institution but were transferred to the Foundling Hospital of Malta at the first opportunity.[4] It ceased to function in 1838 when the Hospital of St. John the Baptist was opened for both sexes. Its site is now occupied by the Seminary.[5]

HOSPITAL FOR INCURABLE WOMEN OR 'CASETTA' OR 'OSPEDALETTO'

The early hospitals set up by the Order of St. John of Jerusalem catered for both men and women. A sisterhood of nuns of the same order was, in fact, founded with the aim of nursing the female patients.[6] By the time, however, that the Knights of St. John came to Malta in 1530 they had ceased to provide hospital treatment for sick women and the community of nuns no longer functioned as a nursing sisterhood; hence when the knights set up their first infirmary in Malta in 1532 and their second one in 1574 they reserved it exclusively for male patients. With the passage of time the need for an adequate number of beds for sick indigent women made itself felt but it was not until the first quarter of the seventeenth century that this gap in the medical services of the Island was filled at the private initiative of a pious lady from Siena who then resided in Malta.

The foundation year of the Hospital for Incurable Women has been given as 1642,[7] but an examination of two manuscript volumes preserved at the Royal Malta Library[8] shows that this date is no longer tenable and that a hospital for women had been in existence before that year. The exact date cannot be ascertained but it is known that the Siennese lady, Caterina Scappi, had set apart a small house for the treatment of poor infirm women since the beginning of the seventeenth century. There is no doubt that by 1625 she had already established this house, known by the title of 'Santa Maria della Scala', for the care of sick women. Later on, on the 15th February 1625, she acquired another house in Valletta at the lower end of Merchants Street from the Nibbia Foundation. This house was situated very near the Holy Infirmary adjoining its burial ground, the Female Foundling Hospital and the chapel of 'Santa Maria della Pietà'. To this building she transferred the women's hospital previously housed at 'Santa Maria della Scala'.

---

[3] Manuscript 389, Royal Malta Library.

[4] Manuscript 384, Royal Malta Library.

[5] Manuscript 389, Royal Malta Library.

[6] De Boisgelin, L., *Ancient and Modern Malta*, London, 1805, vol. ii, p. 216.

[7] Ferres, A., *Memorie dell'Inclito Ordine Gerosolimitano*, Malta, 1881, p. 204.

[8] Manuscript Treasury B 307 and Manuscript B 307 d, Royal Malta Library.

In order to ensure that none of the descendants of Nibbia or her own would, after her death, dare to frustrate her aims or interfere with the permanence of the institution founded by her, she stipulated by means of a legal instrument that the house was to serve no other purpose but the reception and care of needy infirm women. She also laid down that should the building, for some reason or other, fall into the possession of someone else, all her wealth and property were to be employed in the acquisition of other premises for the establishment of a hospital for the treatment of incurable women. She bequeathed her fortune to the institution by a deed of the 20th June 1643 and nominated as executors of her will two knights from Siena. On the demise of these two knights the reigning Grandmaster was enjoined to appoint another two Siennese Knights as protectors and governors of the institution.[9]

It appears that by 1631 the revenues acruing to the hospital had become inadequate for its support and that the Order of St. John was subsidising it. This, however, was against the letter of the 'Ordinationi Capitolari' of 1631[10] which condemned the practice of 'maintaining a home for incurables apart from the infirmary'. In conformity with this regulation the decision was taken to abolish the women's hospital. This step was also dictated by economic reasons for it was envisaged that by the closure of the institution the Common Treasury would be relieved of the burden of the salaries of its staff. No steps, however, were taken at the time to implement this decision although it was never forgotten and was carried into effect many years later for other reasons.

The foundress took a very active part in the management of the affairs of the institution and when she died in 1655 it was proposed to appoint a relative of hers in her stead.[11] The Grand Hospitaller opposed this scheme. It was argued that since the chief of the hospital services of the Order was the Grand Hospitaller, the administration of the '*casetta*' came by right within his jurisdiction. The matter was referred for a decision to the Ordinary Council of the Order who did not uphold the claim of the Grand Hospitaller. The French Langue, however, were not prepared to yield so easily. In fact they invoked the order contained in the 'Ordinationi Capitolari' of 1631 already mentioned and insisted on

[9] Manuscript Treasury B 307, fols. 1–19, Royal Malta Library.

[10] Manuscript in the possession of Chev. Jos. Galea of Mdina, fol. 27.

[11] Caterina Scappi was buried in the church of the Carmelite Convent of Valletta.

its execution. The Ordinary Council had to submit. In this way the Grand Hospitaller won his case and the hospital was suppressed. This step was soon regretted. One class of patients who had benefited from the care afforded by the hospital were the public women who availed themselves of the mercurial treatment provided for the cure of syphilis. In this manner a certain measure of control over the propagation of syphilis had become indirectly established, but with the suppression of the hospital all opportunities of checking the spread of venereal disease were lost. Infected women were no longer in a position to obtain treatment when they desired it, while some of those who were provided with the required medicaments for domiciliary treatment refrained from using them, with the intention of deliberately prolonging the duration of their illness in order to continue receiving the 'pittance'—which was a special free allowance of food—issued to sick needy women by the Order. Those public women, moreover, who were willing to undergo the prescribed treatment were unable to do so for want of the necessary facilities for mercurial inunctions. The consequence was that they 'infected the whole Island with the French disease'.

Another embarrassing circumstance arose from the fact that while, previously, moribund prostitutes received their last sacraments in the decent atmosphere of the hospital now the 'scandalous' position had arisen in which the Blessed Sacrament had to be carried into the houses of women of ill fame and even in places where 'the donkey and the pig were kept'. When representations on these happenings were made to the Grandmaster, Martin de Redin, he was so impressed that he decided to reopen the women's hospital; but this was not an easy task and when he finally succeeded in re-establishing it in April 1659 he did so only after accepting the condition, imposed by the French Langue, that the Grand Hospitaller or his Lieutenant, the Infirmarian and all the administrative officers of the Holy Infirmary could visit the '*casetta*' whenever they thought fit to do so in order to ascertain in what manner the medicaments and provisions were being consumed.[12]

After its restoration many bequests and donations were made to the hospital by charitable and benevolent individuals.[13] These endowments, however, were not sufficient to support the institution and the Order had to continue to subsidise it and to provide it with all that was needed for its proper maintenance. Although the administration of Scappi's bequest remained in the hands of the two senior Siennese knights as stipulated in her deed, the actual management of the institution was entrusted to two Commissioners of the Sick Poor who were professed knights chosen by the Grandmaster.[14] These officials were to see that the place was kept clean, that the patients were well served and that the provisions were of good quality. One of them, or his clerk, supervised the distribution of the diet to ensure that every patient received her due share. Food utensils, large cups and plates were of pewter.[15]

---

[12] Manuscript Treasury B 307, fol. 7, Royal Malta Library.

[13] *Ibid.*, fols. 1–11, Royal Malta Library.

[14] During the occupation of Valletta by the French in 1798 the hospital was administered by two Maltese gentlemen. Manuscript Treasury A 58(13), Royal Malta Library.

The person immediately responsible for the running of the hospital was the Governess who resided in the institution. She was in charge of the bed linen, received patients on presentation of a ticket of admission signed by the commissioners and superintended the closing of the gates at night and the admission of visitors. The nursing staff consisted of four maid servants and a male employee for the administration of hot baths and mercurial inunctions both of which were especially prescribed in spring and autumn. By the end of the eighteenth century a resident female employee was engaged for this purpose ('*la spalmante*') while a midwife and a woman for the treatment of ringworm were also on the staff.[16] The patients were entrusted to the care of two physicians and two surgeons who visited the wards morning and evening. There was also a dispenser who distributed the medicines. A resident chaplain attended to the dying and said Mass daily.

The original edifice underwent many structural modifications at different periods of its history. In 1714 the building was in such a state of disrepair as seriously to alarm the hospital authorities. They, therefore, informed the Grandmaster that the house being old and built on insecure foundations threatened to collapse at the slightest tremor caused by an earthquake or by the discharge of an artillery piece or by 'other accidental shocks'.[17] The necessary repairs were immediately taken in hand and in the same year accommodation was provided, for the first time, for fever cases. Extensive alterations were again carried out in 1727 when the hospital was enlarged by the annexation of two adjoining houses. Its bed complement was raised to two hundred beds, each being provided with a canopy for privacy.[18] This increase in the capacity of the '*casetta*' had been necessitated by the step taken by the Commissioners of the Poor who, in order to check abuses in the distribution of alms and pittances to domiciliary patients, had resolved to admit these patients to the hospital where a better control over expenditure could be exercised. By 1759 the institution had grown into a large building enclosing a central courtyard with its main entrance in Merchants Street. The ground floor, besides administrative offices and the kitchen, had three large wards surrounding three of the sides of a quadrangular courtyard—the Old Ward, the Ward for Mercurial Inunctions and the Surgical Ward.

The first floor was mainly taken up by the New Ward, the largest on this floor, the Small Ward and the Great Ward which communicated directly with the chapel dedicated to St. Catherine of Siena, who had been adopted as the patron saint of the hospital as a sign of respect towards the foundress. Each ward had an altar at one end; thus the Small Ward was dedicated to St. Thomas of Villanova, the Ward for Mercurial Inunctions to St. Francis Xavier, the Surgical Ward to the Annunciation and the New Ward to the Assumption. This last ward also contained a confessional. These altars, together with those of other hospitals were removed in December 1830 with the approval of the ecclesiastical authorities, only the principal altar in each hospital being retained;[19] Mass, however, was still being celebrated in the wards until 1840.[20]

---

[15] Manuscript Treasury A 58(13), Royal Malta Library.

[16] *Ibid.*

[17] Manuscript Treasury B 307, fol. 37, Royal Malta Library.

[18] Manuscript Treasury A 58, Royal Malta Library. Archives 530, fol. 145, Royal Malta Library.

Patients suffering from diseases of the lungs were provided with spitoons while the clothing of tubercular women was put away in a special room reserved for the purpose until it was sent to the laundry. Maternity cases had their own separate ward.[21] There was a large basement which, apart from being used for storing firewood, soiled linen and refuse, also served for the reception of mental patients who were restrained by chains attached to the wall when they became restless.[22]

When Howard visited the hospital in 1786 the number of beds had been increased to two hundred and thirty. Cleanliness left much to be desired and the Governess who accompanied him through his tour of the wards was constantly using the smelling bottle to offset the offensive smells that permeated the whole place. Some changes for the better, as far as cleanliness was concerned, were later effected thanks to the complaints which Howard made to the Grandmaster.[23]

New staff arrangements were made in 1802. The direction of the hospital was entrusted to the Presidents of the Hospitals and the other officials that were responsible for the administration of the Male Civil Hospital. The post of Governess was retained, but the superintendence of the closing of the gates at night was transferred to the chaplain who was also empowered to draw up wills for dying patients and keep them '*ad perpetuam memoriam*'. While a midwife was available for normal deliveries, cases of difficult labour were attended to by the Senior Surgeon.[24] In May 1831 the Lying-in Ward was transferred from the Surgical to the Medical Division. At this period parturient women were reluctant to avail themselves of the services of doctors during labour. The medical officer in charge of this ward kept a register in which he recorded the number of women accepting or refusing the assistance of a male practitioner. It appears that the women who refused help were more numerous than those who accepted it for when the register was submitted to the Permanent Committee the latter expressed 'their regret that so much prejudice should exist on this subject'.[25]

---

[19] Resolutions of the Permanent Committee of 3rd March 1831 to 23rd June 1834, fol. 6, Medical and Health Archives, Valletta.

[20] Minute Book of 13th September 1837 to 27th June 1843, fols. 107 and 233, Medical and Health Archives, Valletta.

[21] Manuscript Treasury A 58(12) and Manuscript Treasury A 58(13), Royal Malta Library.

[22] Manuscript Treasury B 307, fol. 11, Royal Malta Library. Manuscript Treasury B 307 d, fol. 244, Royal Malta Library. Manuscript 1146 (bis), fol. 14, Royal Malta Library.

[23] Bedford, W. K. R., *Regulations of the Old Hospital of the Knights of St. John*, London, 1882, p. 50.

[24] *Piano per il regolamento dell'ospedale di Malta*, Malta, 1802.

Until the mid-century healthy children were admitted with their sick mothers, while healthy mothers were also allowed to reside in the hospital with their sick children.[26] In July 1841 there were no fewer than forty healthy mothers staying in hospital to nurse their children. In many instances four or five members of a family were received into hospital because of the illness of one of them and because of their utter destitution.[27] However, in January 1849 it was decided to discourage this 'vicious' practice as much as possible. Only infants and very young children, who required 'that care which a mother alone can give', were to be admitted.[28]

In 1850 the patients suffering from acute diseases were transferred to the newly opened Central Civil Hospital at Floriana and the '*casetta*' became reserved exclusively for incurable cases of both sexes.[29] At this period its direction was entrusted to a resident priest who was both its chaplain and its superintendent; in the latter capacity he attended to the general administrative needs of the institution and was directly responsible to the Inspector of Charitable Institutions.[30] This arrangement did not last for long for on the 1st June 1864 a physician was appointed superintendent and resident medical officer of the hospital.[31] He had to visit the patients morning and evening and also to compound the medicines and to dress the surgical cases himself. Besides his clinical work he kept the Infirmary Registers, examined the provisions, recommended sanitary improvements to government and saw that the servants were efficient and kind to the sick. He was helped by a wardmaster and a wardmistress who were responsible for the order and cleanliness of the wards and beds.[32] The personal hygiene of the patients was not, however, of the best. No bathrooms were available and the patients were washed on admission in a slipper bath; they were never bathed again except for medical purposes, and that very seldom.[33]

---

[25] Resolutions of the Permanent Committee of 3rd March 1831 to 23rd June 1834, fol. 15, Medical & Health Archives, Valletta.

[26] Letter Book of 27th May 1842 to 12th April 1847, fol. 134, Medical & Health Archives, Valletta.

[27] Letter Book of 2nd January 1838 to 28th April 1842, fols. 141–142, Medical & Health Archives, Valletta.

[28] Hospitals 12 January 1849 to 31st December 1850, fol. 1, Medical & Health Archives, Valletta.

[29] Micallef, R., *Origin and Progress of the Charitable Institutions*, Malta, 1901, p. 14.

[30] *Instructions for the Guidance of the Officers and Servants of the Hospital of Incurables*, Malta, 1860.

[31] Letters to Government of 31st January 1872 to 11th June 1878, fol. 199, Medical & Health Archives, Valletta.

[32] *Instructions for the Guidance of the Officers and Servants of the Hospital of Incurables*, Malta, 1860.

In January 1864 the number of inmates was two hundred and thirty-nine. It was then realised that the institution had become too crowded and that a new larger building was needed. To relieve the congestion as many inmates as were willing to leave the hospital during the summer months were discharged—a practice which persisted for many years. A monetary allowance in lieu of rations was paid to those who were thus temporarily sent home.[34] In spite of the overcrowding it appears that the general atmosphere of the hospital was not below the standards prevailing at the time. Indeed Mr. Alexander Mackay, surgeon to H.M.S. *Marlborough*, who visited the institution at the middle of the century, stated that the cleanliness and order of the wards were 'exceedingly praiseworthy'.[35] So much could not, however, be said of its drainage which at this time was defective in all the Charitable Institutions. The drain emissions were felt at the very entrance of the hospital. Not even the chaplain or wardmistress enjoyed the luxury of a water-closet so that they were obliged to make use of night-chairs in small ill-ventilated rooms.[36] As late as 1879 communication between the cess-pools of the hospital and the main sewer had not yet been effected.

In 1867 an unusual circumstance occurred which strengthened the conviction of the hospital authorities that the building was no longer suitable as a hospital. In that year a heavy ordnance piece was brought over from England and mounted in Fort St. Elmo, which was very near the hospital. The Comptroller of the Charitable Institutions hastened to warn His Excellency the Governor of Malta that certain parts of the hospital building were not considered strong enough 'to resist the apprehended great concussion' which was expected to accompany the firing of the gun. A technical board was, therefore, appointed to survey the building and report on its safety. The board declared that there was no immediate danger and that the effects of the firing of the gun were more likely to cause annoyance to the patients than any real danger to life; however, in spite of this reassurance, the Governor decided to provide more suitable premises for the inmates and he gave orders to the Comptroller of Charitable Institutions to remove the patients to another building. Unfortunately this order could not be carried out as the Comptroller could find no unoccupied building in town or country capable of accommodating two hundred and fifty patients, so that the inmates had to remain where they were until a new asylum was erected.[37] It was envisaged that this new hospital for incurable cases would be opened by 1887 but it was not until 1892 that the '*casetta*' was evacuated and the patients were transferred to the new Hospital for the Aged and Infirm at Mghieret.[38]

---

[33] Letters to Government of 16th March 1865 to 3rd May 1867, fol. 401, Medical & Health Archives, Valletta.

[34] Letters to Government of 31st January 1872 to 11th June 1878, fol. 160, Medical & Health Archives, Valletta.

[35] Webster, W. B., *English Governors and Foreign Grumblers*, Malta, 1864, p. 27.

[36] Letters to Government of 16th March 1865 to 3rd May 1867, fol. 401, Medical & Health Archives, Valletta.

The old edifice was afterwards converted into a Services Club. It was demolished in the present century, its place being taken by an elementary school for the children of Valletta.[39] This school was destroyed by air bombardment during the Second World War; on its site have now been erected the Science Laboratories of the Royal University of Malta.

---

[37] Register of References to the Comptroller of Charitable Institutions, vol. 5, fols. 53 and 70, Medical & Health Archives, Valletta.

[38] Letters to Government of 1st July 1878 to 22nd March 1883, fol. 94, Medical & Health Archives, Valletta. Letters to Government of 23rd March 1883 to 20th April 1888, fol. 609, Medical & Health Archives, Valletta. Micallef, R., *op. cit.*, p. 14.

[39] Debates of Council of Government, Sitting of 22nd January 1901, xxv. 603.

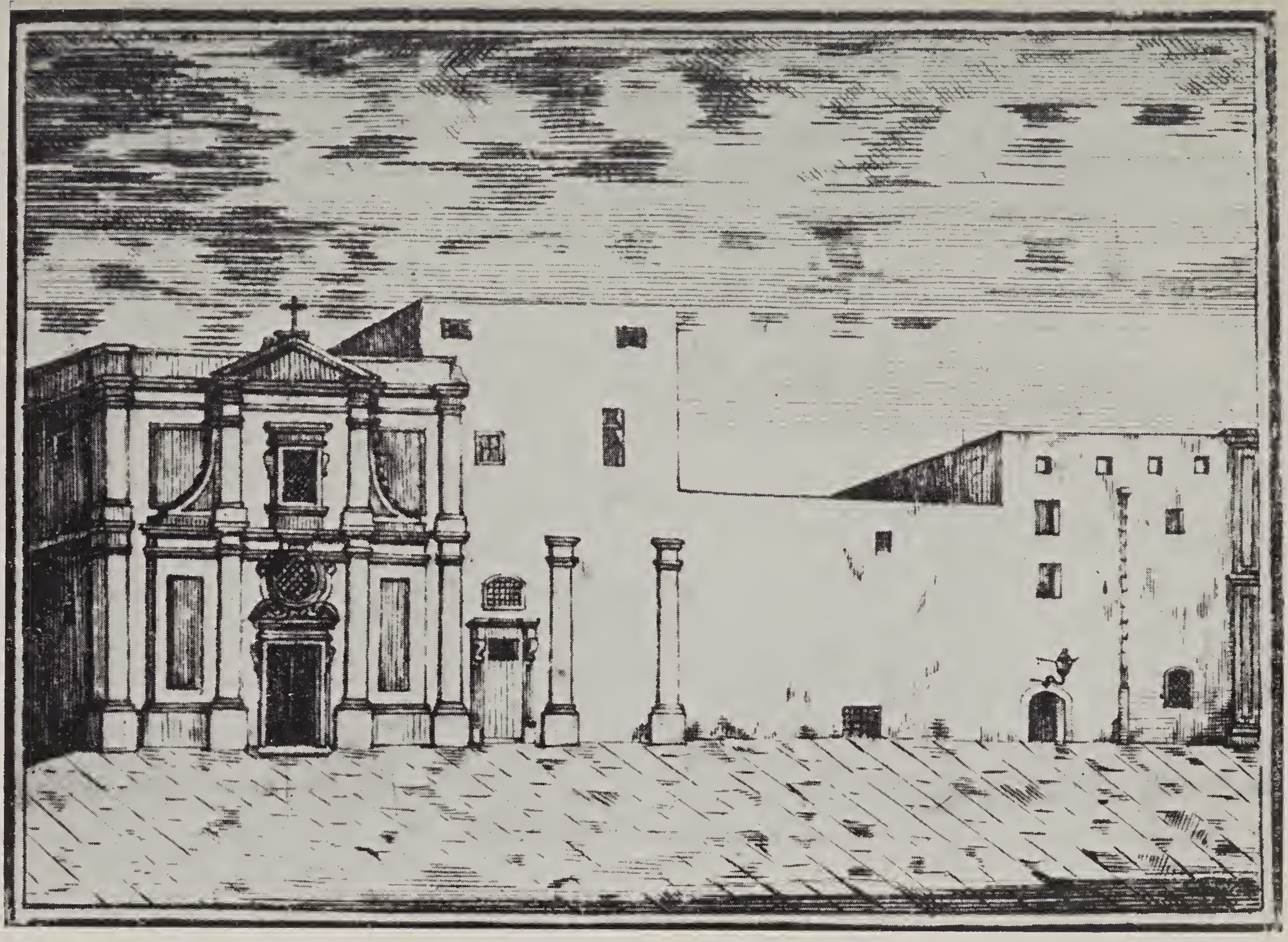


Plate V

The old Civil Hospital at Valletta which received civilian patients when the Holy Infirmary was turned into a military hospital during the French occupation of the Island in 1798. From a medical diploma dated 1833 at the Royal University of Malta.

By courtesy of the Vice Chancellor and Rector Magnificus

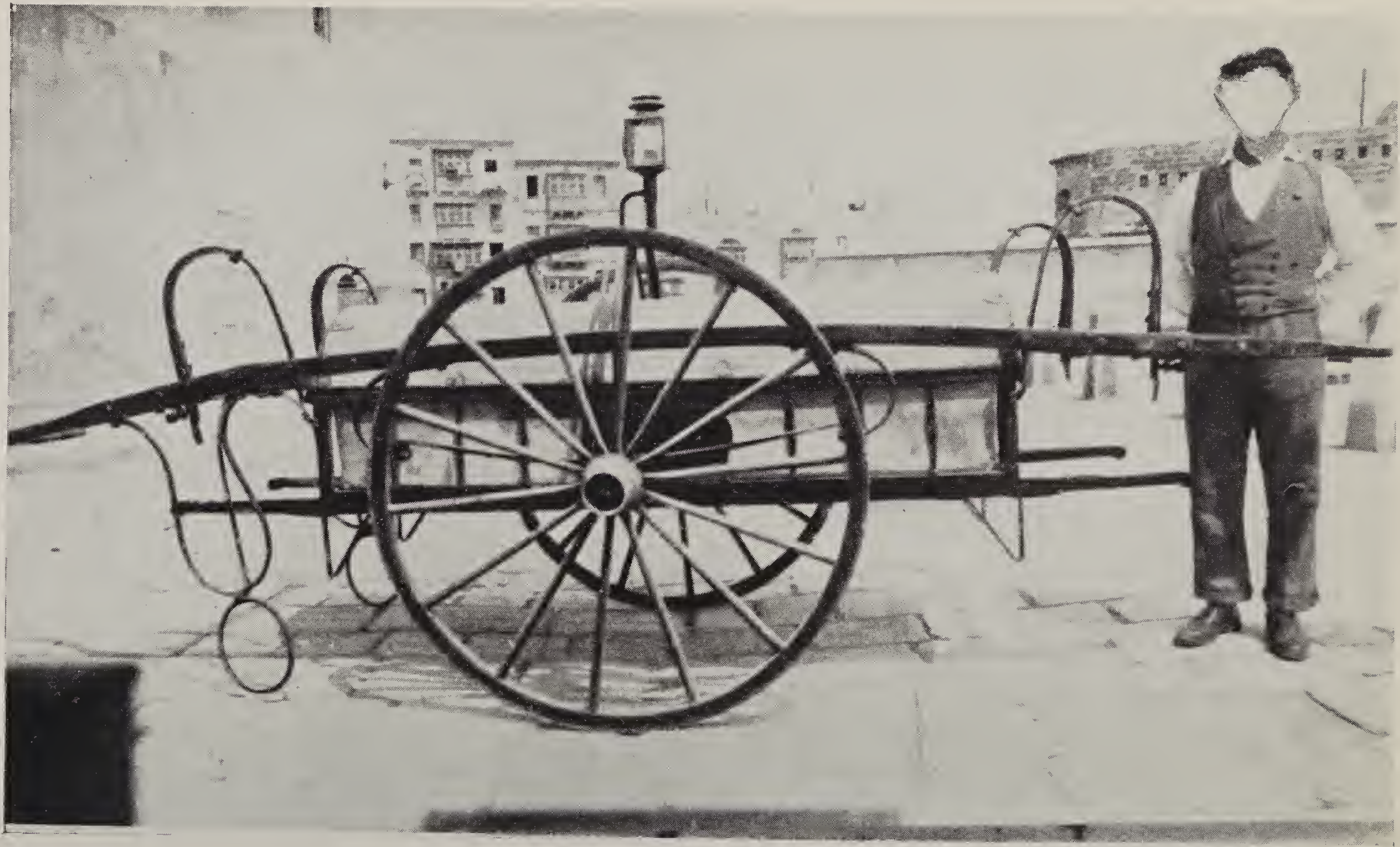
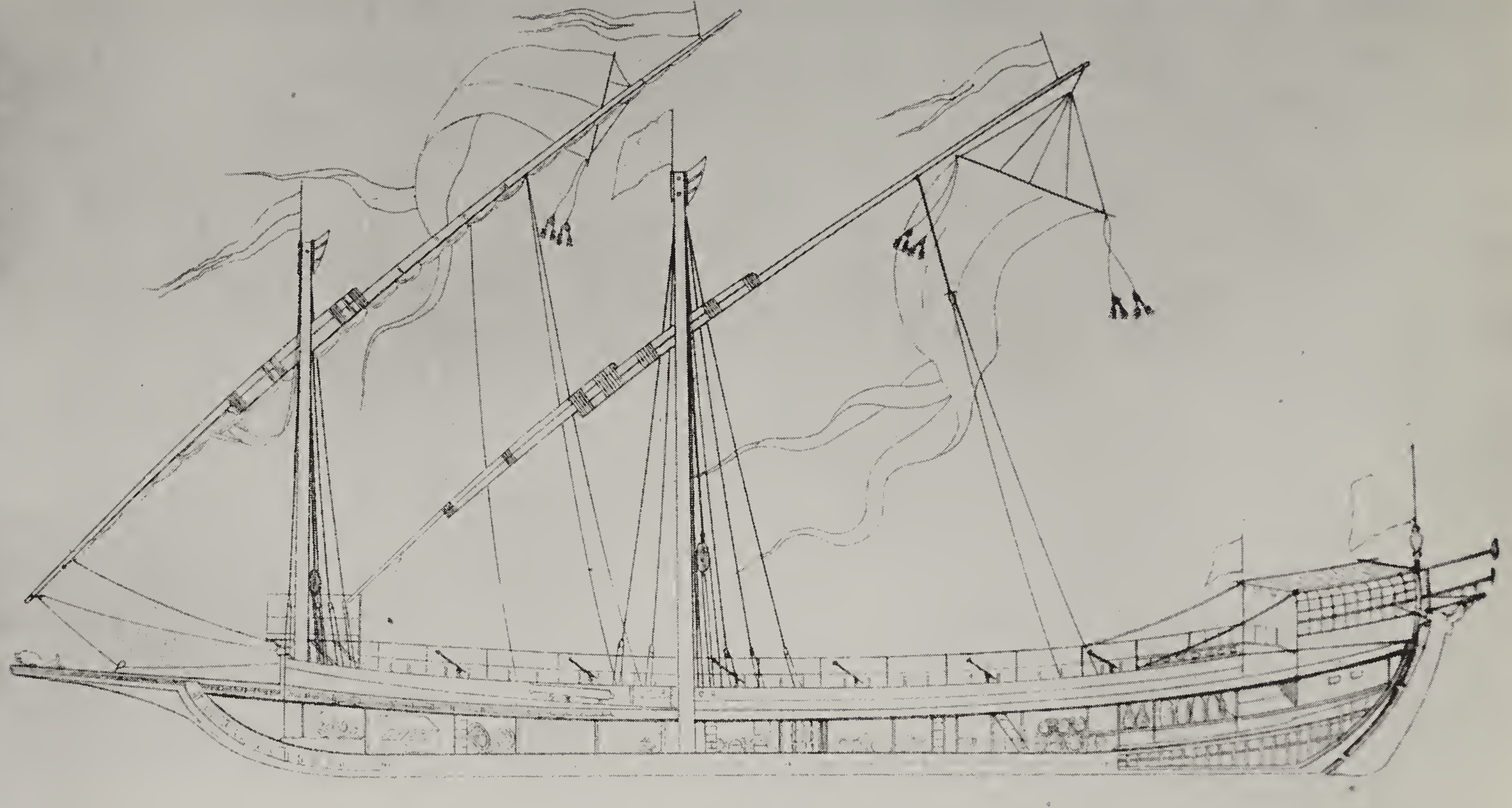


Plate VI

The 'cataletto'—a covered stretcher on wheels—used for the transport of patients to hospitals until the first quarter of this century.

By courtesy of Dr. J. Darmanin Demajo, Birkirkara



Section of a Maltese galley

Plate VII

Section of a galley to show the ship's construction and accommodation.

From the 'Penny Magazine' 1841, Vol. 2, p. 151

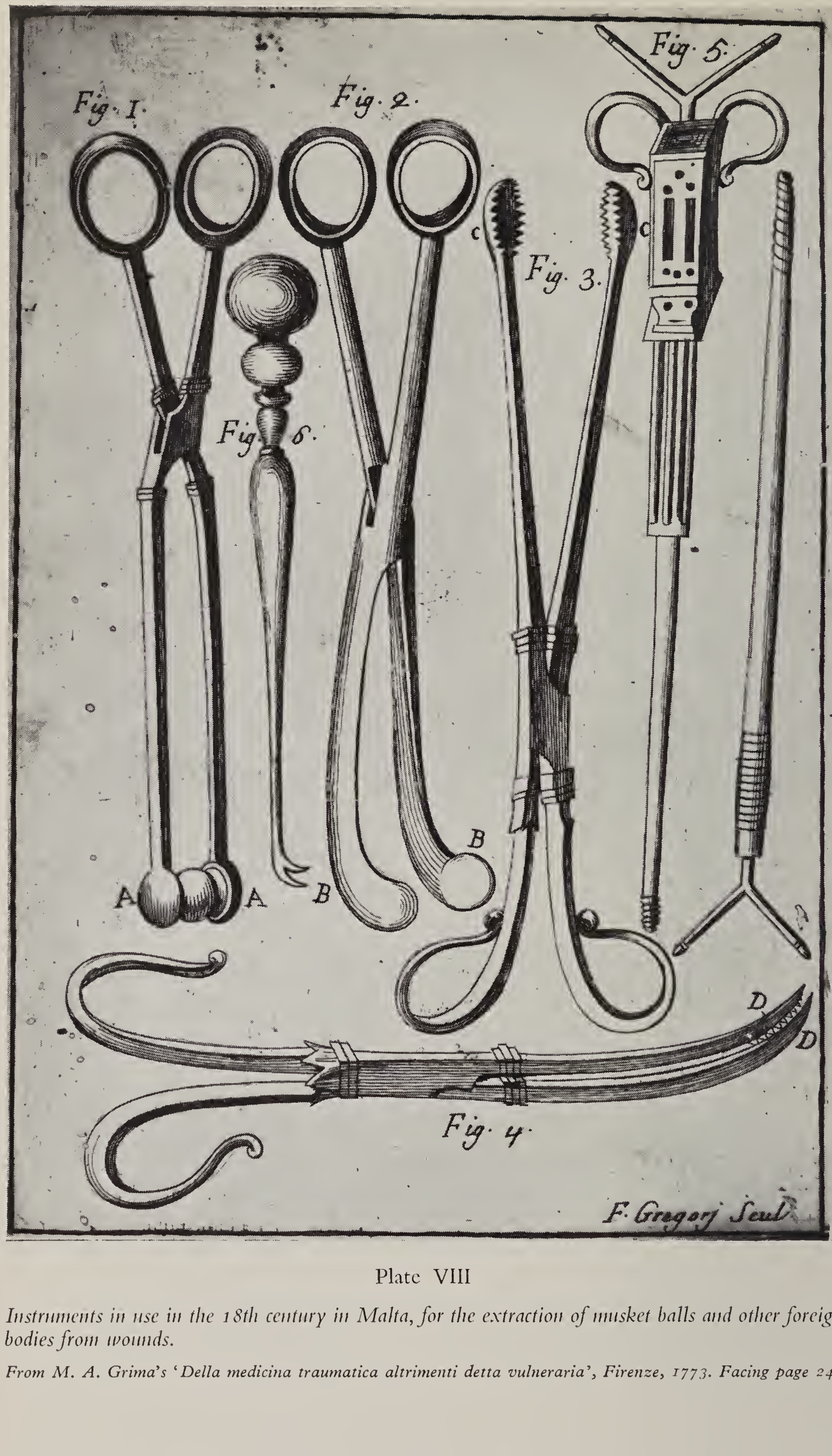


Plate VIII

Instruments in use in the 18th century in Malta, for the extraction of musket balls and other foreign bodies from wounds.

From M. A. Grima's 'Della medicina traumatica altrimenti detta vulneraria', Firenze, 1773. Facing page 240

CHAPTER 7

The Civil Hospital for Men at Valletta

It has already been told how, in 1798, Napoleon took over the Holy Infirmary from the Order of the Knights of St. John for the exclusive use of his troops. By this appropriation of the Holy Infirmary, which up till then had catered for all the male inhabitants of the Maltese Islands, the need arose for a hospital to house the male section of the population. The 'Commission du Gouvernment' therefore appointed a sub-committee of three of its members to inspect the Women's Hospital and to report whether it was feasible to accommodate male civilian patients in that building. Next to the Women's Hospital was the so called 'Casa delle alunne' where illegitimate infant girls were received and brought up. The sub-committee suggested that this establishment could be adapted as a men's hospital after some structural alterations were effected. The inmates of the 'Casa delle alunne' were removed to another building and when the structural work was accomplished about seventy civilian patients were transferred from the Holy Infirmary to the new wards towards the end of 1798.[1] This arrangement was short-lived.

A French decree of the 16th June 1798 had reduced the number of convents in the Island to only one for each monastic order. In accordance with this decree the Mother Superior of the Monastery of St. Mary Magdalen at Valletta was informed on the 23rd July that her convent was being suppressed. This monastery had been founded in 1595 through the efforts of Grandmaster Hugues Loubenx Verdalle for the reception of fallen women and its direction was entrusted to the nuns of the Order of St. Ursula. The evicted nuns were escorted by French troops to the Convent of St. Catherine in Valletta and their monastery was turned into an 'Hôpital Civil' for men. The transfer of the sick from the makeshift hospital in the 'Casa delle alunne' was effected some time before January 1799. In May of the same year the church adjoining the hospital was also taken over and adapted as a casualty ward after its de-consecration by the bishop at the request of the government.[2] The choir was converted into a dispensary. The upper floor of the monastery was used for fever wards and the lower rooms as surgical wards and stores. Part of the basement housed the mental patients. A dead-house was built in the yard. These arrangements were so unsatisfactory that 'hospital disease' was the immediate result; it has been aptly said that 'this monstrous establishment was made to work but certainly not to cure'.[3] The professional staff consisted of two Senior Physicians and two Senior Surgeons, three Junior Physicians and three Junior Surgeons and two Barber-surgeons.[4]

---

[1] Archives 6523, fols. 8, 20, 30 and 288, Royal Malta Library.

[2] Archives 6523 D, fols. 22 and 30, Royal Malta Library.

When, in 1800, the Maltese and their allies entered Valletta following the French capitulation of the city the Civil Hospital was assigned to the use of the Neapolitan troops under Colonel G. B. Fardella; however, Sir Alexander Ball, one of the leaders of the Maltese, did not countenance this move and he insisted that the hospital should be returned to Maltese civilians. Thus arose one of the most bitter disputes between Fardella and Ball. The Neapolitan Colonel refused to budge or to surrender the hospital to the Maltese 'giving them those advantages derived from the healthy air and comfort of this building'. He proposed that the Maltese patients be housed in another edifice in Valletta and deplored the fact that Ball 'had preferred the Maltese to the troops of His Majesty (the King of the Two Sicilies)'. Ball remained adamant and after the Neapolitan troops were offered five small rooms in the former Holy Infirmary they had to evacuate the monastery in the last week of November 1800.[5] The 'Hôpital Civil' thus reverted to the use of Maltese civilian patients. A set of rules and regulations modelled on those of the Holy Infirmary were drawn up for its good government in 1802. Its highest officials were the Presidents of the Hospital who were responsible to government for the good running of the establishment and who enjoyed 'all the prerogatives, honours and powers' which belonged to the Grand Hospitaller in the time of the Order.

The lay officers of the institution were: (a) Two Commissioners each of whom was on duty on alternate weeks. They supervised the quality of provisions, examined the accounts, saw that the hospital was kept clean and well ventilated, accompanied the doctors on their rounds to ensure the observance of 'attention and charity towards the sick and of good order during the visit'. They slept in the hospital to be able to pay surprise visits at night to the wards to make sure that the attendants were awake and that gravely ill patients were adequately looked after; (b) Two Administrators who were responsible for the purchase of foodstuffs, stores and drugs. They were assisted by four clerks who kept the various registers, account and diet books of the hospital; by a 'lingiere' in charge of the linen and by a 'bottigliere' who distributed the wine and bread to the wards.

---

[3] Manuscript 387, fol. 5, Royal Malta Library. Manuscript 409, no pagination, Royal Malta Library.

[4] Archives 6523 C, fol. 43, Royal Malta Library.

[5] Gentile, E., 'Corrispondenza di Giovanni Battista Fardella da Malta', *Archivio Storico di Malta*, 1937, ix. 253–272.

The professional staff consisted of: (a) Two Principal Physicians each one doing duty for a month. Besides his clinical work he had to check the Prescription Books and Diet Sheets. Every three months he examined the drugs and medicaments at the hospital pharmacy. (b) Two Junior Physicians ('*prattici*' or 'medici secondari') who, like their chiefs, were on a monthly roster but relieved one another in the middle of the month. They accompanied their chief during his rounds, wrote the prescriptions, helped in the preparation of medicines at the pharmacy and supervised their administration to the patients by the pharmacists. When the Police Physician for Valletta was on leave they were to examine public women brought to them by the police and to issue certificates concerning all market cases referred for a medical opinion by the Clerk of the Market.[6] (c) A Master of Physick ('*Maestro di Fisica*') who applied vesicants and performed bloodletting and cupping. He was assisted by four apprentices who applied fomentations and cataplasms. (d) Three Principal Surgeons who, besides surgical patients, had also under their care those suffering from scabies and venereal diseases. They saw surgical out-patients daily. (e) Four Junior Surgeons ('*chirurghi secondari*'), of whom only two were on duty each month, assisted the Principal Surgeons and performed anatomical dissection and post-mortem examinations under the direction of their chief. (f) A surgeon who was in charge of splints, instruments, bandages and other appliances ('*chirurgo d'apparecchio*'). (g) An assistant who was employed for the application of suspensories and belts prescribed by the surgeons ('*braghista*'). (h) A number of paid surgical students ('*allievi di chirurgia*') carried out minor operations under the guidance of the surgeon. Several of the medical men who eventually filled these posts at the beginning of the British connection had rendered their professional services gratis to the people in the countryside or were attached to the various battalions of the Maltese insurgents during the revolt against the French.[7]

The pharmacy was under the direction of a Principal Apothecary who had four pharmacists to help him. Two of these accompanied the physician during the ward-round; one wrote down the prescriptions ordered by the physician while the other one carried a small box containing those medicinal preparations that were usually administered to the sick during the ward visit such as cordials, opiates, anodyne spirit, etc. The pharmacists also distributed the medicines to the patients during the day-time in accordance with the instructions of the physicians.

The pharmacy not only supplied the needs of the institution and of the 'Ospizio' but also issued medicines to indigent women, the Officers of the Royal Malta Regiment, the crews of British merchantmen in quarantine and several convents and nunneries. The drugs were bought by the apothecary locally. Frequently, however, their quality was not of the best while the prices charged were very high. Sometimes such commonly used items as Peruvian or Quill Bark were unobtainable. To overcome these difficulties the Permanent Committee of the Charitable Institutions began obtaining the drugs from the Military General Hospital where they could be had at London market prices.[8] In 1839 the policy was initiated of buying the drugs directly from London through an agent but ten years later they were being acquired through the Agent General for the Crown Colonies. To control the expenditure on drugs the list of medicines in use at the hospital was revised and brought into line with that of Her Majesty's Military Hospital where 'a rigid regard to economy in the exhibition of medicines' was especially enjoined.[9]

---

[6] Hospitals 12th January 1849 to 31st December 1850, fol. 9, Medical & Health Archives, Valletta.

[7] Registro Decreti Lettere, fols. 3–9, Medical & Health Archives, Valletta.

There were two classes of attendants on the sick, the 'guardians' who nursed the sick and had charge of the ward linen, and the 'servants' who were engaged in menial work.[10] A notary was employed to draw up the wills of the patients.[11]

The extreme poverty of the Maltese labourer and farmer in the third decade of the century following the fall in prices of cotton was responsible for a marked deterioration in hospital conditions. The patients received into the institution were 'generally very miserable looking and full of lice'. By 1837 the wards had become overcrowded. Many of the inmates did not need any active medical or surgical treatment but were old people and chronic sick who, in better times, would have remained at home. The 'Ospizio' could not accommodate them as out of the 1,200 applicants on the list only one hundred were being admitted each year. There were also a number of men and women who had recovered from their illnesses but who could not be sent away from hospital because they had no means of subsistence; when some of them were discharged home they returned to hospital suffering from diarrhoea. A number of the medical staff suggested taking over the Military Hospital, where there was ample space, to relieve the congestion in the Civil Hospital but no steps were taken in this direction.[12] These conditions began to improve in 1839 with the gradual advancement of the economic state of the Island resulting from increased commerce and steam navigation. In 1848 the hospital engaged the attention of the Medical Society of Encouragement ('Società Medica d'Incoraggiamento'). A delegation of the society inspected the building which they found badly ventilated owing to the small number of windows in the wards. On the ground floor there was a Ward for Convicts who were kept chained to the iron trestles of their beds—a practice that was eventually discontinued on humanitarian grounds as the convicts had to 'drag the trestle along with them' when they had occasion to go out of the ward.[13] The dead-house had been removed from the yard in 1837 when it was erected in the cemetery in the vicinity of the hospital at the back of the Anatomical Theatre.[14] The yard was then planted with ornamental trees. The church was still used as a surgical ward, being reserved for the treatment of fractures and other injuries. The medical division, on the first floor, consisted of five wards with one hundred and twenty beds.[15] As by 1845 there were seldom less than thirteen English-speaking patients in hospital, it was decided to gather them in one single ward in the Surgical Division to enable them to avail themselves of the services of a priest who visited them 'to read prayers and give them consolation'.[16] There was also a ward for venereal patients who were not allowed to leave hospital until they were cured. This ruling had been established by the Permanent Committee in June 1834 but was rescinded in November 1840 when it was found that the Committee had no right to keep patients in hospital against their will except those sent by the police.[17]

---

[8] Charitable Institutions Book No. 29, fols. 34 and 49. Letter Book of 2nd January 1838 to 28th April 1842, fol. 2. Permanent Committee of 1st January 1816 to 31st December 1829, fols. 17, 161 and 194, Medical & Health Archives, Valletta.

[9] Letter Book of 2nd January 1838 to 28th April 1842, fol. 102. Government Letters to Inspector of Charitable Institutions, 1848–1852, no pagination. Government Letters to Committee of the Charitable Institutions, 1837–1843, no pagination, Medical & Health Archives, Valletta.

[10] *Piano per il regolamento dell'ospedale di Malta*, Malta, 1802.

[11] Registro Decreti Lettere, fol. 41, Medical & Health Archives, Valletta.

[12] Records of the Comitato Generale Maltese 1836–1839, x, no. 1, fols. 178–180 in the possession of Dr. Albert Ganado, LL.D., Valletta.

With the exception of venereal patients who had straw palliasses, the sick were provided with woollen mattresses and pillows but their beds consisted of boards placed on iron trestles.[18] In general the bed-clothes were changed once a fortnight and the personal linen once a week but the medical officer was empowered to have them changed as often as he deemed fit. Food was served in plates and soup porringers of silver until 1818 when pewter began to replace the silver ware that became unserviceable.[19] At the right side of each bed there was a table and over the head-end of the bed hung a tablet bearing the progressive number of the bed, the name and surname, age and address of the patient and the diagnosis of his illness. Clinical histories were only drawn up in the case of patients suffering from some serious disease or showing illnesses which merited

---

[13] Resolutions of the Permanent Committee of 7th July 1834 to 9th August 1836, fol. 79, Medical & Health Archives, Valletta.

[14] Resolutions of the Permanent Committee of 23rd August 1836 to 20th May 1837, fol. 58, Medical & Health Archives, Valletta.

[15] *Storia della Società Medica d'Incoraggiamento*, Malta, 1845, p. 194. Critien, A., 'A Convent and a Hospital of the Past', *Archivum Melitense*, 1940, x. 213.

[16] Letter Book of 27th May 1842 to 12th April 1847, fol. 61, Medical & Health Archives, Valletta.

[17] Letter Book of 2nd January 1832 to 28th April 1842, fols. 87–90, Medical & Health Archives, Valletta.

[18] Resolutions of the Permanent Committee of 3rd March 1831 to 23rd June 1834, fol. 19. Letters to Government of 9th June 1849 to 26th August 1850, fol. 16, Medical & Health Archives, Valletta.

[19] Resolutions of the Permanent Committee of 3rd March 1831 to 23rd June 1834, fol. 121. Permanent Committee of 1st January 1816 to 31st December 1829, fols. 54 and 68, Medical & Health Archives, Valletta.

'observation'. They were recorded in a 'Register of Clinical Observation'. It was not possible for every patient to have a written history as otherwise one of the assistant physicians would have been kept continuously occupied in that work—a circumstance which the hospital medical staff could not afford.[20]

Admission was, mainly, restricted to the poor sick but soldiers of the Malta Fencible Regiment were also accepted for treatment until August 1840 when they were taken over by the General Military Hospital.[21] 'Paying patients' began to be received in 1849.[22] All forms of diseases were treated. Separate wards were provided for those suffering from scabies, cancer and eye diseases. The hospital, however, did not always enjoy the confidence of the masses for there were times when the people only sought admission when they had no alternative with the result that on these occasions the medical officer on duty had nothing to do because of the lack of fresh admissions. But the days of the Civil Hospital were drawing to a close for in October 1848 plans were prepared for the conversion of the House of Industry at Floriana into a general hospital. The work was completed in May 1850 and on the last day of the month the patients were transferred to Floriana by '*calesse*' (a horse-drawn carriage) and by '*cataletto*' (a covered stretcher carried by bearers on foot).[23]

The one-time monastery and hospital was then adapted as an Orphan Asylum. After almost a century the orphans were evacuated to a safer place at the outbreak of the Second World War when the edifice was severely damaged by air bombardment (1941).

[20] Letter Book of 27th May 1842 to 12th April 1847, fol. 61, Medical & Health Archives, Valletta.

[21] Government Letters to the Committee of Charitable Institutions, 1837–1843, no pagination, Medical & Health Archives, Valletta.

[22] *L'Avvenire*, 15th December 1849, p. 19.

[23] Hospitals 12th January 1849 to 31st December 1850, fols. 32 and 34, Medical & Health Archives, Valletta.

CHAPTER 8

The Central Hospital and St. Luke's Hospital

IN 1734 a building, known as the 'Conservatorio', was erected at Floriana by Grandmaster Ant. Manoel de Vilhena for the reception of poor girls to be taught various crafts and then given a dowry to enable them to settle in marriage when they became of age.[1] This institution was reformed in 1825 and given the designation of House of Industry but in 1836 the Royal Commissioners recommended its suppression. After the girls were dispersed or removed to other institutions and after various structural modifications were carried out, the building was, in 1850, adapted as a general hospital for both sexes under the title of the Central Hospital.[2] The male patients from the Civil Hospital and the acutely sick women from the '*casetta*' at Valletta were transferred to the new establishment in the same year.

Its site was an unhappy one. That its structural features were also objectionable was made clear to the government by Sir Penrose Julyan in 1879.[3] It adjoined the military barracks of Floriana so that the patients had to endure the noise of military activity and the clamour of bugles and drums. Ventilation was defective, the water supply insufficient and the kitchen small and poorly lighted. The dead-house was not only next to one of the wards but was also used as a post-mortem room for the necropsies of all corpses, sometimes in a most obnoxious condition, brought from the town and from the waterside. The hospital also suffered great inconvenience from the untrapped drain openings in the neighbourhood. The drain could at times be smelt at a great distance especially during the hot months.[4] Its social environs, too, were far from ideal. Two wine shops existed opposite the main entrance of the hospital and there soldiers and seamen used to congregate and, in their drinking bouts, would sing 'in chorus and positively deafen the neighbourhood and annoy particularly the suffering sick with their yells and wild notes'.[5] In these shops harp-boys, fiddlers and flute players were always in attendance while, to increase the din, go-carts drove to and fro conveying customers so that patients entering hospital in the evening had to be carried 'through music, prostitutes and other scenes of profligate merriment'.

---

[1] Ferres, A., *Memorie dell'Inclito Ordine Gerosolimitano*, Malta, 1881, p. 220.

[2] Micallef, R., *Origin and Progress of the Charitable Institutions*, Malta, 1901, p. 18.

[3] Penrose, P. G., *Report on the Civil Establishments of Malta*, London, 1880, p. 25.

[4] Letters to Government of 5th March to 31st January 1872, fol. 80, Medical & Health Archives, Valletta.

The reforms in hospital administration wrought by Florence Nightingale were very fresh in the memory of Sir F. V. Inglott, the Comptroller of Charitable Institutions, who, mindful of her dictum that 'unnecessary noise is the most cruel absence of care which can be inflicted either on sick or well', tried to put a stop to this revelry by proposing to the government the removal of the offending shops from the immediate vicinity of the hospital. Unfortunately Inglott's proposal was considered too drastic but steps were taken to have the shops conducted in such a manner as not to disturb the sick in hospital.[6]

In 1850 the medical staff consisted of a Principal Physician and a Principal Surgeon (known also as the Principal Medical Officers), a Junior Physician and a Junior Surgeon, an Assistant Physician and an Assistant Surgeon, a Resident Physician and a Resident Surgeon, a Pharmacist and two assistants.[7] The administrative work was performed by the storekeeper and the professional visiting and resident staff. The Principal Medical Officers were directly subject to the Inspector of Charitable Institutions and were responsible for the due observance by their subordinates of all orders, regulations and instructions. Their administrative duties included the daily examination of provisions, the keeping of various registers and the submission to the Inspector of such alterations in the general management of the institution as might conduce to the advantage of the sick. They were obliged to visit the patients morning and evening at certain established hours. Post-mortems were held, when the occasion arose, after the morning visit. All the medical officers assembled in the dead-room and the Principal Medical Officer, under whose charge the patient had been, read the clinical history and, after the performance of the necropsy, wrote the autopsy report and read it to his colleagues prior to leaving the post-mortem room.

The surgeon did not enjoy the same clinical independence as the physician in 1850. Before performing an operation he was obliged to hold a consultation, if the case admitted of the requisite delay, with the whole surgical staff. The opinion of all the surgeons was heard, beginning with that of the most junior. If surgical intervention was decided upon, the operation was performed by the surgeon who had charge of the patient.

The Junior Physician and the Junior Surgeon deputised for their respective chiefs. The Resident Medical Officers were empowered to act on their own responsibility and even to operate when the Principal Surgeon could not be found. In other respects, however, they must have felt that their liberty was rather curtailed since they were not allowed to smoke or to hold parties in their rooms to avoid disturbing the sick.[8] In November 1849 the policy was started of appointing newly qualified doctors as Resident Medical Officers, their selection being based upon the results of their University examinations. The first appointment was made on the 20th April 1850.[9]

---

[5] Letters to Government of 5th March to 31st January 1872, fols. 130–132, Medical & Health Archives, Valletta.

[6] Register of References to Comptroller of Charitable Institutions, vol. ix, fol. 56, Medical & Health Archives, Valletta.

[7] *Almanacco di Malta*, 1850, p. 32.

Until 1835 it was still the accepted custom for a medical man aspiring to join the government service to submit a petition to government for an appointment as an extra or supernumerary assistant at the Civil Hospital with a view to succeeding to a vacancy when one eventually occurred. The Permanent Committee, however, was not satisfied with the practice of granting posts in anticipation without due consideration of the merits and qualifications of the applicant. They, therefore, recommended that vacancies for assistants should be filled by public competition to secure the services of the most skilled medical men. Government approved this suggestion on the 13th June 1835, examinations for the post of Junior Assistant being first held in September 1836 under the auspices of the University.[10] However, in spite of this wise step, vacancies in other hospitals were not filled by examination[11] while up to 1849 advancement in the medical services rested mainly with His Excellency the Governor, on the basis of seniority. His Excellency the Governor, Sir Richard More O'Ferrall, realised that one of the disadvantages of this system was the possibility of the appointment of an incompetent person; it was true that the Governor had the authority to pass over persons who were clearly incompetent but, as he himself admitted, this power was 'subject to much animadversion which occasionally prevents its exercise even where it might be justifiable'. He, therefore, decided that the higher posts such as those of Principal Physician and of Principal Surgeon were to be filled up by election. The voters were the members of the Committee of Charitable Institutions, the medical professors of the University and the hospital medical officers, the election being supervised by a President appointed by the Head of the Government. Physicians and surgeons in public employment and all medical men of ten years standing in the profession outside the government service were eligible for the posts. The person elected by a majority of votes was appointed to the vacant office subject to the approval of the Head of the Government.[12] The first election was held on the 20th December 1849 in the Council Room of the University when Dr. Luigi Pisani was elected to the vacant post of Principal or Senior Surgeon;[13] this, however, appears to have been the only instance where the new procedure was followed as in 1867 the Comptroller of Charitable Institutions stated that promotion continued to be made according to rank and length of service.[14]

---

[8] *Instructions for the Guidance of Officers and Servants attached to the Central Civil Hospital*, Malta, 1851.

[9] Hospitals 12th January 1849 to 31st December 1850, fols. 14 and 24, Medical & Health Archives, Valletta.

[10] Resolutions of the Permanent Committee of 7th July 1834 to 9th August 1836, fols. 61, 106, 150 and 161; and of the 23rd August 1836 to 25th May 1837, fols. 5 and 17, Medical & Health Archives, Valletta.

[11] *Storia della Società Medica d'Incoraggiamento*, Malta, 1845, p. 198.

On the 4th May 1889 a Commission was appointed by His Excellency the Governor to inquire into and report on the duties and salaries of the employees of the Charitable Institutions. Among other suggestions this Commission proposed the creation of the post of Resident Medical Superintendent on the pattern of most continental and British hospitals in order to ensure uniformity in the management of the hospital. A similar suggestion had already been put forward by the Commissioners of Charity as early as 1856.[15] The appointment of a Junior Visiting Physician and a Junior Visiting Surgeon was also recommended with a ward to be assigned to each of these officers, who were to be independent of the senior visiting staff as regards the treatment of the patients in their wards except when some important operation was required. The senior physician and senior surgeon, however, being professors at the University were to retain the right to select cases for clinical demonstrations to their students from the wards of the junior visiting staff.[16]

From 1872 onwards admissions into hospital increased steadily and by June 1878 its population was 170. It became hardly possible to accommodate the number of acute cases brought to it and to separate those who needed treatment in isolation.[17] The decision to admit all cases of contagious and infectious illnesses—a portion of whom had up till then been received into Santo Spirito Hospital—was partly responsible for this state of affairs. This step, however, had been rendered unavoidable because the position at Santo Spirito was worse since that hospital lacked the necessary space for the isolation of cases of measles, scarlet fever, diphtheria and whooping cough sent to it from the countryside. In 1885 the same difficulties recurred when for want of room in the male surgical division some of the patients had to be placed in the corridors.[18] On the 11th

---

[12] *Regulations for the Government Charitable Institutions of Malta & Gozo*, Malta, 1851, p. 11.

[13] Despatches 22nd December 1849, Royal Malta Library. *Malta Government Gazette*, 14th December 1849, p. 163.

[14] New Organisation of the Central Hospital 1867, fol. 5, Medical & Health Archives, Valletta.

[15] Commissioners of Charity, Letters Issued of 15th May 1851 to 4th November 1857, fol. 178, Medical & Health Archives, Valletta.

[16] Letters to Government of 20th April 1889 to 8th April 1895, fols. 320, 323 and 325, Medical & Health Archives, Valletta.

[17] Letters to Government of 31st January 1872 to 11th June 1878, fols. 406 and 745, Medical & Health Archives, Valletta.

[18] Letters to Government of 23rd March 1883 to 20th April 1888, fol. 275, Medical & Health Archives, Valletta.

November 1885 the Comptroller of Charitable Institutions submitted very detailed suggestions to the Superintendent of Public Works for the erection of a new pavilion hospital—a plan which was then considered to be superior to any other in every respect. Extensive grounds were to encircle it for the recreation of convalescent patients, to prevent the hospital from being hemmed in by private houses and to ensure the possibility of further extension when additional accommodation became necessary. Two divisions were projected, one for men and another for women, with a total of 354 beds. The provision was also made for operating theatres for surgical, gynaecological and ophthalmic cases, lecture rooms, pathological and bacteriological laboratories and an out-patient department. To protect the hospital against heat and cold double ceilings were to be constructed while a tramway was projected to provide an easy means of transport of food, linen, etc., between the various parts of the establishment. Unfortunately all these plans came to naught.[19]

In 1898 the allocation of beds at the Central Hospital relative to the Island's population worked out at one bed for every nine hundred inhabitants, a proportion that was considerably below that obtaining in other countries. The consequence of this shortage was that patients had to be discharged before they had completely recovered from their illness while others were refused admission notwithstanding that beds were often set up in the corridors. Want of space was not, however, the only unsatisfactory feature in this situation. As already stated the building had been raised in an age when the principles of sanitation were hardly known at all with the result that provisions for ventilation and drainage were inadequate and inefficient. The government was well aware of these shortcomings; in fact it was realised that the building was so ill adapted as a hospital that all the money spent on its improvement could never secure the benefits expected from it. 'Nothing short of a new hospital', insisted the Comptroller of Charitable Institutions, 'constructed on modern principles and supplied with all requirements can meet such public want in a satisfactory manner.'[20] The Chief Secretary to the Government, too, considered the provision of a new building 'an urgent necessity'[21] but nothing was done.

In June 1906 a Commission under the chairmanship of the Comptroller of Charitable Institutions declared in a report drawn up in accordance with the directions of His Excellency the Governor: 'The hospital building being formed of one block and its available accommodation being very limited, no separation of diseases can effectually be made. Cases of fever, phthisis and skin and other communicable diseases have often to be treated in one ward or in the adjoining wards together with other patients; and in the Surgical Division the work of the medical officer in charge is often hampered by the existence of infectious cases in other wards. Delirious, severely injured and dying patients cannot be separated to the great annoyance and sometimes prejudice of others; and there is no special accommodation for operated patients. . . . We are further of opinion that the accommodation available in the hospital is quite inadequate to meet the requirements of the population. The number of beds in that institution is two hundred. Taking into account the Hospital of Santo Spirito at Rabat, which can hold 72 patients, the total number of beds in Malta for a population of about 183,200 is 272 or at the rate of one bed for every 673 inhabitants. . . . We may also here mention that, as far as we are aware, what is considered generally by hospital authorities to be a moderate proportion is 4 beds for every 1,000 inhabitants. . . . In view of the fact that the defects of the existing building cannot in any way be effectually remedied, we think that the requirements of the population cannot otherwise be met except by the creation of buildings in a suitable position to serve as a general hospital and, at the same time, afford clinical instruction to medical students.'[22] Thus the story went on, all fresh hopes being dashed by recurring disappointments.

---

[19] Miscellaneous Letters Issued from 7th June 1892 to 16th March 1895, fol. 518, Medical & Health Archives, Valletta.

[20] Letters to Government from 10th April 1895 to 31st March 1903, fol. 426, Medical & Health Archives, Valletta.

[21] *Colonial Reports, No. 270*, London, 1898, p. 37.

The trade depression of 1922 again brought to the fore the need for a more spacious hospital as patients, who in more prosperous days would have preferred to remain at home, were driven to seek treatment in hospital. For want of space additional beds were set up in the middle of the wards and the sick were often refused admission.[23] Provision for the establishment of a General Hospital Fund of £75,000 was finally made in 1927 with the promulgation of Act No. XXVIII. Meanwhile to relieve the increasing pressure on accommodation, emergency wards for fever cases, convalescent surgical patients and others were opened at the Poor House in 1928 as well as wards for the isolation of children with ringworm of the scalp and trachoma.[24]

Initially it was planned to erect the new hospital in the vicinity of Imriehel, near Birkirkara[25] but in the end the promontory of Gwardamanġa, between Pietà and Msida, was chosen for its site. It is of interest to note that in a map of Valletta and its environs drawn up in 1803 a hospital is shown on almost the same site.[26] The foundation stone was laid in April 1930. Work came to a standstill at the outbreak of the Second World War, but part of the main block had been completed and was put into use as an emergency hospital under the title of St. Luke's Hospital. When work was resumed in 1945 the original plan which catered for a maximum of 450 beds was modified to augment the accommodation to 536 beds;[27] however, in spite of these alterations and additions, St. Luke's Hospital did not succeed in solving the problem of accommodation. In the following words of the Chief Government Medical Officer written in 1953 one cannot help hearing the echo of the anxieties of the medical administrators of more than fifty years ago: 'In these Islands like in other countries, we have our own hospital problem which is becoming increasingly pressing year by year. It is due to the fact that the increased hospital-mindedness of the public has not been followed by a corresponding or relative expansion in the hospital service. It is true that good progress has been made but not to such an extent as to satisfy our present needs.'[28] In fact after the commissioning of the new hospital the ophthalmic and the dermatological wards remained at the partly evacuated Central Hospital. The rest of the old building was temporarily used as a Parcels Office by the Postal Authorities and finally turned into the Headquarters of the Malta Police Force in March 1954.[29]

---

[22] Letters to Government from 1st April 1903 to 10th April 1909, fol. 375, Medical & Health Archives, Valletta.

[23] *Report of the Comptroller of Charitable Institutions for 1922–23*, Malta, 1924, p. 1.

[24] *Annual Report of the Comptroller of Charitable Institutions 1928–29*, Malta, 1929, p. 8.

[25] Mifsud Bonnici, C., *Xoghol ta tliet snin gvern*, Malta, 1927, p. 20.

[26] Walsh, T., *Journal of the Late Campaign in Egypt*, London, 1803, p. 20.

[27] *Times of Malta*, 3rd March 1953, p. 6.

[28] Report on the Health Conditions of the Maltese Islands, *Malta Government Gazette Supplement*, 28th December 1954, p. 10.

[29] *Times of Malta*, 12th March 1954, p. 9.

CHAPTER 9

Victoria Hospital, Gozo

THE general hospital of Gozo, the sister island of Malta, has an unbroken record of service of over two hundred years. It originally bore the title of Hospital of St. John the Baptist and St. Anthony of Padua but when the town of Rabat (Gozo) was officially declared a city and its name changed to that of Victoria on the occasion of Her Majesty's Jubilee in 1887, the ancient name of the hospital fell into oblivion and the institution became known as Victoria Hospital.[1]

The hospital came into existence through the piety of the Rev. Giovanni Maria Camilleri, Canon of the Chapter of Rabat (Gozo), and his brother the Rev. Gregorio Camilleri, Chaplain of Obedience of the Order of St. John of Jerusalem. It was founded on the 16th June 1719 under the patronage of the Grandmaster. In those days it was necessary to obtain the sanction of the Holy See for the establishment of pious foundations and the Grandmaster, Fra Marco Antonio Zondadari, hastened to acquire the confirmation from Pope Clement XI by a Bull of the 8th June 1720.[2] Three years later the canon met his death under tragic circumstances. He was murdered, together with his maid servant, in his house at Rabat and it was rumoured that he was killed by a relative out of revenge for having deprived him of an inheritance in consequence of the priest's donation of his property to the hospital.[3]

The aim of the founders in establishing a hospital in Gozo was to overcome the hardships and inconveniences that patients from that Island had to endure during their transit from Gozo to the Holy Infirmary at Malta. Besides a sea crossing, which was not without danger and which was not always possible owing to rough weather, an overland journey of eighteen miles increased the discomforts of the patient before he reached the Holy Infirmary at Valletta from Mtarfa. On account of these transport difficulties the sick often preferred to stay at home without the required treatment while some of those who risked the journey died on the way without sacraments.[4] The Municipality of Gozo was responsible for the erection of the hospital but this body does not seem to have appreciated these difficulties as much as the Camilleri brothers for it showed no zeal in executing the founders' wishes. Fortunately Grandmaster Fra Marco Antonio Zondadari was very anxious to see the building begun and on the 23rd May 1721 directed the Jurats of Gozo to deal forthwith with the owners of the site in order to acquire it for the hospital. A week later he enquired as to the steps taken to bring the matter to a final issue. Things appeared to move very slowly for in another letter of the 19th July he expressed his regret at the negligence shown by the Jurats in carrying out his orders. Almost a year passed before the ground was acquired from the Friars of St. Francis and other landowners and before a call for tenders was issued during the Grandmastership of Zondadari's successor, Fra Antonio Manoel de Vilhena.[5] The plans were only drawn up in 1726, the edifice being completed three years later on the designs of the engineer Chevalier Henri de Mondion. It was blessed by Bishop Paolo Alpheran and officially opened on the 14th October 1729. The building consisted of two centrally placed wards with a spacious courtyard on each side. Each of the wards had an altar at one of its ends, one being dedicated to the Immaculate Conception, St. John the Baptist and St. Anthony of Padua, and the other to SS. Cosmas and Damian.[6]

---

[1] *Malta Government Gazette*, 10th June 1887, p. 301.

[2] Manuscript 384, no pagination, Royal Malta Library.

[3] Manuscript 382, no pagination, Royal Malta Library. Manuscript 389, no pagination, Royal Malta Library.

[4] *Ibid.*

At about the time of the opening of the hospital an unusual occurrence resulted in a considerable augmentation of the revenues of the hospital. A peasant, while tilling his fields, unearthed a golden idol in the form of a heifer.[7] Not knowing its worth he bartered it for a trifle with a wealthy Gozitan, the Jurat Giuseppe Cassar. When the Grandmaster eventually heard of this discovery he sought to acquire the idol but the Jurat refused to disclose what he had done with it in spite of his being submitted to the torture in an attempt to obtain a confession. Cassar was put on trial for refusing to reveal the whereabouts of the treasure and sentenced to prison. His property was confiscated and made over to the Treasury. The Grandmaster, by a deed of the 28th October 1729, donated the confiscated tenements and money to the hospital.[8] The prisoner had been so ill-treated that he had to be sent to the hospital which had acquired his wealth and there he eventually ended his days as a convict in chains at the age of seventy-three years.[9]

A set of regulations was issued on the 12th December 1729 for the management of the institution, its administration being entrusted to the Municipality of Gozo. Only male patients were admitted. The medical staff consisted of two physicians, who were on duty on alternate months, and a resident surgeon who, besides performing the duties of barber and barber-surgeon, was likewise in charge of the medical stores and did the clerical work of the hospital. The financial side of the administration was in the hands of a steward who submitted the hospital accounts to the Municipality for auditing.[10] These arrangements lasted until 1818 when by a proclamation of the 10th December of that year the Municipality of Gozo was abolished and its functions taken over by a Commission of three members and by the Collector of Inland Revenue. By this change, the government obtained a better control over the administration of the institution while the latter gained by the addition of a surgeon and of a midwife.[11] Years later the management of the hospital was transferred to the Department of Charitable Institutions.

---

[5] Manuscript 389, no pagination, Royal Malta Library.

[6] *Ibid.*

[7] Abela, G. F., and Ciantar, G. A., *Malta illustrata*, Malta, 1780, vol. i, p. 365.

[8] Archives 268, fol. 126, Royal Malta Library.

[9] Manuscript 389, no pagination, Royal Malta Library.

For many years a number of old and infirm men had been granted asylum in the hospital but in 1838 these inmates were removed to the Malta 'Ospizio' at Floriana to make room for the female patients who were transferred from St. Julian's Hospital on the recommendations of the Commission of Inquiry of 1837.[12] In this manner the hospital opened its doors to patients of both sexes. It also took in sick British and Maltese soldiers stationed in Gozo as well as prisoners.[13] With the passage of time the hospital proved to be too small for the needs of the population. In 1847 it was found impossible to receive all who required treatment and the only solution which could be devised was to accept only the most urgent cases, the rest being treated as out-patients or else advised to enter the hospital at Malta. In spite of these arrangements the pressure was not appreciably relieved and the physician in charge of the hospital was driven to placing two patients in one bed—an expedient which was shortly dropped following its condemnation by the Comptroller of Charitable Institutions.[14] After much insistence on the part of the hospital authorities steps were taken, as the century matured, to provide the required additional accommodation. This structural expansion of the building continued up to quite recent times so that the hospital is now in a position to deal with over eight hundred patients a year.[15]

---

[10] Liber Bullarum 533, fol. 179, Royal Malta Library.

[11] Manuscript 384, no pagination, Royal Malta Library.

[12] *Ibid.*

[13] Letter Book of 2nd January 1838 to 28th April 1842, fol. 5, Medical & Health Archives, Valletta.

[14] Letters Issued from 16th 1847 to 30th December 1853, fol. 9, Medical & Health Archives, Valletta.

[15] *Report on the Health Conditions of the Maltese Islands*, Malta, 1937, p. 51.

CHAPTER 10

Naval and Military Hospitals

BRITISH SEAMEN'S HOSPITAL

FACILITIES for the treatment of British merchant seamen were provided in various Mediterranean ports in the last quarter of the nineteenth century. In some places, such as Port Said and Constantinople, special British Seamen's Hospitals had been set up while in other ports, such as Gibraltar and Alexandria, no such establishments existed and seamen were treated in civilian hospitals.[1] Malta was in this second category, sick sailors being received in a ward in the surgical division of the Central Hospital specially reserved for this purpose. The ward was opened on the 20th November 1850 and designated as the 'British Merchant Seamen Ward'.[2] An earlier hospital for merchant seamen had been set up at the beginning of the century but it was closed in 1822[3] when sick merchant sailors began to be received into the Civil Hospital. The Hospital Duty levied on British vessels arriving in Maltese ports and hitherto paid to the Treasurer of the Merchant Seamen Hospital was made over to the government.[4]

The seamen treated in the ward at the Central Hospital were an unruly and rough set. It was not uncommon for a sailor to report himself sick to obtain admission into hospital until his ship sailed away from the Island. Then he would declare himself well and thus be discharged from the institution. Once at liberty he entered 'upon a course of debauchery' which either sent him back to hospital really sick or else threw him in distress upon the government. To curb these and other abuses a set of regulations for 'Sick, Discharged, Distressed and Delinquent British Merchant Seamen' was jointly drawn up by the Superintendent of Quarantine and Marine Police and the Inspector of Charitable Institutions and Prisons.[5] This measure, however, had no effect on the 'recklessness of sailors, their ignorance and . . . their want of forethought' and for many years afterwards these seamen remained a source of trouble to the hospital authorities. In April 1881 the Visiting Physician was compelled to report them to the Comptroller of Charitable Institutions for their insubordination and to request that immediate steps be taken to control this evil which, he feared, could be attended with unpleasant consequences. A board of enquiry was appointed but none of the usual disciplinary measures then in vogue (such as dismissal from hospital or reduction in the amount of diet) could be applied since the seaman had no relatives to go to in Malta and since a reduction in diet would have interfered with their medical treatment. A remedy was found, through the appointment of a former ship-chandler, for the enforcement of discipline; this man being quite familiar with the ways of seafarers succeeded in maintaining good order among them.[6]

---

[1] Letters to Government from 20th April 1888 to 8th April 1895, fol. 550, Medical & Health Archives, Valletta.

[2] Hospitals of 12th January 1849 to 31st December 1850, fol. 64, Medical & Health Archives, Valletta.

[3] Thornton, W. H., *Memoir on the Finances of Malta*, Malta, 1836, p. 68.

[4] Letter Book of 27th May 1842 to 12th April 1847, fol. 61; Permanent Committee from 1st January 1816 to 31st December 1829, fol. 155, Medical & Health Archives, Valletta.

Meanwhile a scheme for the construction of a small separate hospital for seamen on a site adjoining the Central Hospital had been submitted to the government in July 1880.[7] Steps were taken in 1881 to convert the quarters formerly occupied by the resident medical officer of the Central Hospital into a small hospital for the reception of twenty-five men. The new hospital, to which a skittle ground was attached, was opened on the 28th March 1882.[8] By the end of the year the Comptroller of Charitable Institutions expressed himself quite satisfied with the new institution which he said 'has not only met our expectations in all respects but has also proved successful from a financial point of view'; in fact a statement of the receipts of the Superintendent of Ports as hospital dues and of expenditure showed a substantial balance in favour of the government.[9] An English matron and a trained nurse were responsible for the nursing arrangements which appear to have worked smoothly except in the case of the nursing of venereal patients—a duty which was considered to be 'repellent to a sense of decency for a woman'.[10]

Eventually the hospital became too small for the number of patients who needed treatment and plans for building a new one were being studied in June 1883.[11] Some shipping agents offered to contribute £100 each to defray part of the cost of erecting it[12] but this scheme was not carried into effect so that in May 1885 the Comptroller of Charitable Institutions proposed to the government, in default of a better solution, that a large house at Floriana or Kordin be provisionally acquired to accommodate the British Seamen's Hospital until a new one was ready.[13] In those days shipping constituted one of the most important sources of national income and it was realised that it was in the interest of the Island to afford every facility for the hospital treatment of merchant seamen.[14] With the passage of years, however, the problem of accommodation disappeared in the face of a financial one. By 1896 the hospital was being run at a loss while the number of patients admitted into it had dwindled to two. This reduction in the number of admissions and in the amount of funds was due partly to the decrease in the number of ships touching at Malta and partly to the fact that seamen's hospitals were being established in neighbouring ports. Under these circumstances it was hardly worthwhile to continue to maintain the hospital; on the other hand it was considered unwise to suppress it for fear that such a step would have had a detrimental effect on the commercial interests of the Island. In order, therefore, not to allow the hospital to fall into disuse and, at the same time, to relieve the congestion in the adjoining Central Hospital, twelve paying patients from the latter place were transferred to the Seamen's Hospital.[15]

---

[5] Letters to Government from 9th June 1849 to 26th August 1850, fols. 9–13, Medical & Health Archives, Valletta.

[6] Letters to Government from 1st July 1878 to 22nd March 1883, fol. 321, Medical & Health Archives, Valletta.

[7] *Ibid.*, fol. 231.

[8] Micallef, R., *Origin and Progress of the Charitable Institutions*, Malta, 1901, p. 22.

[9] Letters to Government from 1st July 1878 to 22nd March 1883, fol. 530, Medical & Health Archives, Valletta.

[10] *Ibid.*, fols. 448, 526 and 561.

[11] Letters to Government from 23rd March 1883 to 20th April 1888, fol. 25, Medical & Health Archives, Valletta.

[12] Letters to Government from 1st July 1878 to 22nd March 1883, fol. 582, Medical & Health Archives, Valletta.

As the shipping position continued to deteriorate while the demand for beds at the Central Hospital became more and more pressing, the government finally decided to establish the British Seamen's Hospital in other premises and to incorporate the building with the Central Hospital. An agreement was, therefore, made with the nursing order of the Little Company of Mary, who ran the Zammit-Clapp Hospital in Sliema, whereby sick merchant seamen were to be received and treated in this private hospital. The British Seamen's Hospital was accordingly closed down after its patients were transferred to their new home on the 29th August 1911.[16]

THE ROYAL NAVAL HOSPITAL OR BIGHI HOSPITAL

The first British naval hospital was established in 1800 in the Armoury at Birgu or Vittoriosa but infectious cases were sent to the Military General Hospital at Valletta. In 1803 the Slave Prison of the Order, known also as the Grand Prison and situated in St. Christopher Street, Valletta, was temporarily taken over by the naval authorities and the patients were transferred to this building, which remained in use as a hospital until the 1st July 1819 when the sick were transferred back to the Birgu Armoury.[17] The staff of the hospital consisted of a surgeon, an assistant surgeon, a dispenser and an agent who was in charge of stores and equipment. In peacetime patients were few in number, rarely exceeding twenty, though the hospital was capable of accommodating one hundred and twenty. In an emergency eighty or one hundred more beds could be added.[18] The Armoury ceased to be a naval hospital in 1832 when it was made over to the military authorities who, for some years, used it as sick quarters for soldiers in the Cottonera area.[19]

---

[13] Letters to Government from 23rd March 1883 to 20th April 1888, fol. 276, Medical & Health Archives, Valletta.

[14] *Ibid.*, fol. 771.

[15] Letters to Government from 10th April 1895 to 31st March 1903, fol. 84, Medical & Health Archives, Valletta.

[16] *Malta Government Gazette Supplement*, 22nd November 1912.

Bighi Hospital rises on the promontory that juts into the Grand Harbour between Rinella Bay and Kalkara Creek. It is so called because it occupies the site of the former country villa of Bali Fra Giovanni Bichi, a knight of the Order of St. John, erected about the year 1675. It appears that the first person to refer to the place as Bighi instead of Bichi was Sir Alexander Ball in 1799. Lord Nelson and others distorted it into the Palace of Bughay and even the Palace of Bugia.[20] Fra Giovanni Bichi was a nephew of Pope Alexander VII who was in Malta as Inquisitor from 1634 to 1639. Bichi was in the naval service of the Order and he eventually gained command of the Papal Fleet that was operating in the Levant in conjunction with the Venetian and Maltese Squadrons. In his capacity as Admiral of the Papal Fleet Bichi was instrumental in setting up a hospital for seamen at Civitavecchia in the Papal States.[21] The coupling of his name with a later naval hospital in Malta, though purely accidental, is not therefore incongruous apart from the fact that as a knight he was a member of an order of hospitallers. He died of the plague in 1676 and is buried in the small church of San Salvatore near the entrance of the hospital.[22]

During the rising of the Maltese against the French in 1798 the villa was nearly demolished for the sake of its beams and woodwork[23] and was subsequently allowed to fall into ruins. The suggestion to establish a naval hospital on the Bichi site came from Nelson. Towards the end of 1803 the place was inspected by Dr. John Snipe, Physician to the Fleet, who found the spot very suitable for a naval hospital. The villa was surrounded by grounds in a high state of cultivation capable of producing 'an abundance of vegetables for the use of the sick and if lemon and orange trees were planted, the Fleet on this station might be amply supplied with these antiscorbutic fruits'. He was of the opinion, however, that if the villa was fixed upon as a permanent hospital two wings would be required to be built on to the existing structure; nothing, however, was done for many years. During the pestilence of 1813 the villa was converted into a plague hospital for the three cities on that side of the harbour and it was not until March 1829 that the mansion was handed over to the Royal Navy. The first stone was laid by Vice-Admiral Sir P. Malcolm on the 23rd March 1830 the work being entrusted to two Maltese architects and completed in 1832. The original villa of Bichi occupied the central part of the building but was reconstructed to conform with the general plan of the hospital; in it were the chapel and the medical officers' quarters.[24]

---

[17] Darmanin, J. F., 'The British Naval Hospitals in Malta with Particular Reference to Bighi', *Archivum Melitense*, 1939, x. 162 and 166.

[18] Hennen, J., *Sketches of the Medical Topography of the Mediterranean*, London, 1830, p. 580.

[19] Manuscript 388, no pagination, Royal Malta Library.

[20] Darmanin, J. F., *op. cit.*, p. 155.

[21] Mifsud, A., *Knights Hospitallers of the Venerable Tongue of England in Malta*, Malta, 1914, pp. 17 and 299.

[22] Darmanin, J. F., *op. cit.*, p. 156.

[23] *Muir's Almanack for 1867*, Malta, p. 47.

A contemporary writer thus describes the hospital in 1840: 'It is capable of containing 250 patients having two large and four small wards, besides rooms for officers, in each pavilion. One of the best things in the establishment is a corridor, ten feet wide and one hundred and sixty feet long, which runs through the centre of each wing ventilating it in all directions. . . . It receives about eight per cent of the ships' companies of the fleet yearly, being with ten thousand men, about eight hundred in the year. The mortality among the patients is extremely small, not exceeding 4 per cent of the number received, though they consist of the worst cases of the squadron. Indeed the health of the whole Mediterranean fleet is so good that perhaps it has no parallel in the world, the mortality being only, on an average, seven per thousand excluding accidents which are two per thousand.'[25]

At this period a British medical man, who was later to gain repute in world medicine as an eminent surgeon and gynaecologist, was on the staff of the hospital as an assistant surgeon. He was Thomas Spencer Wells, F.R.C.S., who, in a paper published in 1844, has left us a picture of the pattern of diseases prevailing among naval personnel in Malta in his time. In this report on the cases admitted to hospital during 1843–44 he gives their clinical history and manifestations, discusses their diagnosis and treatment and describes the necropsy of fatal cases. He took care to preserve the post-mortem specimens which he sent to the pathological museum of Haslar Hospital.[26] Bichi hospital was the scene of the first ether anaesthesia in Malta on the 6th March 1847 at the hands of the same surgeon, as will be told in a later chapter.

Major structural additions were undertaken at the beginning of the present century when the surgical and the zymotic blocks were built in

---

[24] Manuscript 388, no pagination, Royal Malta Library. MacGill, T., *Handbook or Guide for Strangers Visiting Malta*, 1839, p. 77. *Almanacco di Malta per l'anno 1863*, Malta, p. 48.

[25] *Malta Penny Magazine*, no. 59, 24th October 1840, p. 233.

[26] Spencer Wells, T., 'Report of Cases Treated in the Royal Naval Hospital Malta in 1843 and 1844', *Edinburgh Medical & Surgical Journal*, 1846, lxvi. 1.

1901 and 1903 respectively. A cemetery had been established in the hospital grounds but it ceased to be used for burials in 1900.[27]

BIRGU OR VITTORIOSA MILITARY HOSPITALS

Besides the General or Station Hospital of Valletta (the erstwhile Holy Infirmary of the Order of St. John), there were other military hospitals during the last century and the early decades of the present one. Mention has already been made of the Vittoriosa Hospital housed in the Armoury. At a short distance from it was the so called Hired Hospital consisting of two adjoining private houses in St. George's Street close to Dockyard Creek.

Part of Fort Ricasoli, at the entrance of the Grand Harbour, was occupied as a hospital to replace another one that had been housed in the Inquisitor's Palace of Vittoriosa. A number of the high bomb-proof arcades that run along the inner face of the land side of the fort was cut off by wooden walls from the rest of the arcades occupied by healthy troops. A wooden floor was thrown across an end of the upper part of these arcades so that two storeys were formed. The upper one was partitioned off into two wards and a surgery; in its wooden floor gratings were cut to promote the ventilation of the ground floor which was reserved for convalescent soldiers and other patients requiring segregation. This hospital had a complement of fifty-four beds which could be increased to one hundred in an emergency. In 1822 it sheltered the invalids and discharged men belonging to regiments stationed in the Ionian Islands. By the sixth decade of the last century the fort hospital was no longer in use.[28]

HOUSE OF THE MADONNA OF MANRESA AT FLORIANA

This edifice dates from 1740 and was meant for the use of ecclesiastics and laymen who wished to retire there for the performance of spiritual exercises.[29] Its conversion into a military hospital during the early years of British rule provoked the protests of the Maltese who, in 1811, complained bitterly of this act and many persons offered to surrender their own houses to ensure that the House was not used for other than religious purposes.[30] In spite of these remonstrations the place was retained as a hospital although not all the building was occupied as such. It consisted of a range of small rooms built round two sides of a big quadrangle, each room containing four beds. A total of sixty patients, and in an emergency eighty, could be accommodated. Owing to the smallness of the rooms, this building offered the opportunity for an easy classification of patients in accordance with the nature of their ailments—an advantage that had already been recognised in those days. The hospital was still functioning in 1830.[31]

---

[27] Falconer Hall, J., 'The Royal Naval Hospital, Malta', *Journal of the Royal Naval Medical Service*, 1927, xiii.

[28] Hennen, J., *op. cit.*, pp. 576 and 578. Galton, D., and Sutherland, J., *Report of the Barrack and Hospital Improvement Commission on the Sanitary Condition and Improvement of the Mediterranean Stations*, London, 1863, pp. 120 and 179.

[29] Ferres, A., *Memorie dell'Inclito Ordine Gerosolimitano*, Malta, 1881, p. 156.

[30] Mitrovich, G., *Cause of the People of Malta*, London, 1836, p. 78.

MDINA SANATORIUM

This hospital was established in what was formerly the Magisterial Palace and Law Courts of the old city of Mdina. When it was opened in 1858 it was meant to provide treatment for eye diseases among the British troops. Subsequently it was turned into a convalescent home or sanatorium for fever cases from the General Hospital of Valletta. It was noted that fever cases got worse at the Valletta hospital but when they were transferred to Mdina they improved.[32] In fact patients did so well here that there was a scheme to extend its accommodation of eighty-eight beds to the dimensions of a general hospital for the garrison; this idea was, however, abandoned as no adequate additional amount of space could be obtained for the erection of new wards. It was made over to the Civil Government in 1908 and in the following year was turned into a tuberculosis hospital.

FORREST HOSPITAL, ST. JULIAN'S BAY

Villa Spinola was adapted as an army hospital in 1860 and named after the Principal Medical Officer of the garrison during that year.[33] The villa was originally built in 1688 by the knight Fra Paolo Raffaele Spinola, Prior of Lombardy.[34] As a hospital it contained forty-two beds and was intended to be used partly as a sanatorium and partly as a reception centre for the sick from the nearby Pembroke Barracks but many cases from the Valletta Hospital were also admitted.[35] During the First World War it received troops suffering from venereal diseases. It was closed down in 1922.[36]

COTTONERA HOSPITAL

With the exception of the Mdina Sanatorium all the army hospitals in existence in Malta at the mid-nineteenth century were condemned by the members of the Barrack and Hospital Improvement Commission who declared in 1863 that there was not a single good military hospital

[31] Hennen, J., *op. cit.*, p. 575.

[32] Galton, D., and Sutherland, J., *op. cit.*, p. 121.

[33] Zammit, T., 'San Giljan', *Il Malti*, 1935, p. 132.

[34] Ferris, A., *op. cit.*, p. 234.

[35] Galton, D., and Sutherland, J., *op. cit.*, p. 121.

[36] Gray, R. J., Personal communication, 1960.

in Malta. The Commission proposed the abolition of these establishments and the building of a new general hospital of three hundred beds at Valletta and a smaller one of one hundred and thirty-six beds for the Cottonera area. Plans for a new hospital at St. Michael's Bastion in Valletta were prepared but it was later decided not to proceed further with the scheme and to build new barracks at St. George's Bay instead. Another proposal was later put forward for the erection of a hospital, this time outside Valletta, to consolidate therein the entire hospital administration and to connect it with all the barracks by means of a service of ambulances.[37]

The new hospital was eventually built near Zabbar Gate in 1873. It contained four infirmaries each of which was capable of receiving thirty-two sick men. It cost £21,000 and was considered to be 'one of the best hospitals of southern Europe'.[38] This hospital ceased to function in 1920 and nine years later was offered on lease by the War Office to house St. Edward's College.[39]

DAVID BRUCE MILITARY HOSPITAL, MTARFA

When, towards the end of the nineteenth century, St. David's Barracks were built on Mtarfa hill, a Military Families' Hospital was also erected nearby. It was a fifty bed hospital for the soldiers' families, the troops themselves continuing to receive treatment at the Cottonera Hospital. About 1912 it was planned to build another military hospital at Mtarfa. This was opened on the 29th June 1920 and all patients from other military hospitals were transferred there.

During the early part of the Second World War the hospital and barracks were reorganised as the 90th General Hospital and at the time of the invasion of Sicily it built up to accommodate a maximum of 1,200 beds. An underground hospital was excavated under the military hospital but the successful Sicilian invasion rendered it unnecessary. At the end of hostilities the 90th General Hospital was disbanded and re-formed on a peacetime footing under the name of David Bruce Military Hospital.[40]

KING GEORGE V HOSPITAL, FLORIANA

This hospital came into being in 1922 as a memorial to the men of the Merchant Navy who died in the First World War. It was destroyed on the 7th April 1942 by enemy action during the Second World War. In the following year funds were contributed for its reconstruction by the

---

[37] Galton, D., and Sutherland, J., *op. cit.*, pp. 22, 122 and 123.

[38] *Il Barth*, 22nd July 1873, p. 316.

[39] *Times of Malta*, 16th June 1954, p. 9.

[40] Gray, R. J., Personal communication, 1960.

Scottish Branch of the British Red Cross Society, the Silver Thimble Fund, the Nurses of Britain Gift and other donors.

The rebuilt hospital was inaugurated on St. Andrew's Day, 30th November 1948, by Countess Mountbatten of Burma on the twenty-sixth anniversary of its first opening. Although it caters mainly for merchant seamen, members of service families and civilians are also admitted.[41]

---

[41] *Nursing Times*, 1948, xlvi. 901 and 909–910.

CHAPTER 11

Administration of Hospitals and Charitable Institutions

THE administrative organisation of the medical and hospital services grew up haphazardly, a form of administration being devised for each institution as it came into being. It has already been seen how Santo Spirito Hospital was originally under the direction of a Rector and subsequently of the Municipality of Mdina under the supervision of the bishop to whom later was added the Seneschal of the Order. The Holy Infirmary, together with the Foundling Hospital, was governed by the Grand Hospitaller and his officials; the Women's Hospital was managed by the Commissioners of the Poor who were also responsible for the distribution of medical relief to sick women in their homes; the asylum for the aged or 'Ospizio' was run by a board known as the Venerable Congregation, composed of a Knight Grand Cross as President and ten Commissaries of whom half were members of the Order and the rest prominent Maltese citizens. The various medical institutions during the Order's domination were thus administered independently of one another, there being no central authority to co-ordinate their activities.

No major changes occurred during the short French occupation. The administrative arrangements existing during the Order's time survived the last stormy years of the eighteenth century and remained in being even after the Island passed under British protection. Thus in the early years of the nineteenth century the administration of the two civil hospitals of Valletta was still entrusted to a body of lay Presidents; the 'Ospizio' to a President and a number of Commissaries; the Hospital of Santo Spirito to a President who was usually the Magistrate of the City of Mdina; the distribution of public alms to a Grand Almoner; and the Gozo Hospital for male patients to the Magistrate of that Island.[1] The reason for this kind of administration is to be sought in the fact that nearly all these institutions were founded by private philanthropic individuals at a time when only the poor resorted to hospital in sickness. The provision of adequate medical facilities for all as one of the rights of citizenship had not yet been conceived and the indigent members of the community had to rely on the generosity of a few pious persons who devoted part of their wealth to the foundation of medical institutions for the poor. In the long run the bequests left by these founders proved insufficient for the support of the foundations so that ultimately the institutions came to depend for their upkeep, to a greater or less extent, on subsidies from the government —a trend that had already become manifest in the time of the Knights.

---

[1] *Almanacco delle isole di Malta e Gozo 1806 & 1807.*

The tradition of charity underlying the medical services died very hard so that even when the burden of their maintenance was eventually shouldered by the state, successive governments continued to regard the medical services as a form of charity and to conduct them as such. In fact up to very recent times our hospitals and ancillary establishments were still officially designated as Charitable Institutions. For many years no one had the foresight to see that they were destined to develop into one of the indispensable social services of the country; consequently their growth was not the result of a planned State policy—on the contrary they developed as a sort of patchwork under the stress of needs that called for remedial measures as the occasion arose.

The first attempts to bring all charitable institutions under one administrative authority were made in June 1815[2] and in January 1816 by His Excellency the Governor, Sir Thomas Maitland. In his view these institutions had degenerated into places of resort for the idle and, in some instances, the profligate. With a view to strengthening their discipline and to safeguarding the public treasury against unnecessary expenditure he introduced a uniform system of administration for them. He restricted admission to those who really needed hospital treatment, improved the quality of the food and insisted on the keeping of regular hospital accounts. At this period the number of the sick in the hospitals was one hundred and eighty-eight and of the inmates at the 'Ospizio' four hundred and thirty-three, of whom two hundred and thirty-eight were aged and infirm, one hundred and forty-nine orphans and forty-six mental cases.[3]

From the 1st February 1816 the hospitals, the asylum for the aged and the office of Grand Almoner were merged into one department, the Committee of the Charitable Institutions, with His Excellency the Governor or His Honour the Lieutenant Governor as Patron, and a number of Presidents and Vice-Presidents one of whom was the Protomedicus or Physician-in-Chief.[4] The Permanent Committee of the Charitable Institutions responsible for the day-to-day management of the establishments was composed of four Vice-Presidents from the Committee of Charitable Institutions, two of whom met daily. When some difference arose between these two members the point in question was brought to the notice of the Permanent Committee for a decision and in the event that no agreement could be reached even by this body the matter was referred to the Committee of Charitable Institutions.

---

[2] *Malta Government Gazette*, 28th June 1815, p. 369.

[3] Permanent Committee from 1st January 1816 to 31st December 1829, fols. 2 and 7, Medical & Health Archives, Valletta.

[4] Government Notice of 15th January 1816, *Malta Government Gazette*, 24th January 1816, p. 493.

Maitland's unified system of control did not last for very long. Unemployment was widespread in Malta in the second decade of the century with the result that applications for financial assistance from impoverished persons became numerous and the need for a minute examination of these claims led to the transfer of this function to the newly created Committee for the Distribution of Alms.[5] Further decentralisation, which would have resulted in the emergence of the medical establishments of the Charitable Institutions as separate departments, was not allowed to take place. The Royal Commissioners of 1837, who had been sent to the Island to inquire into its affairs, deplored the departure from Maitland's principles of control and proposed the re-formation of a single board or Committee to superintend all the charities, including those of Gozo which were then being administered by the Lieutenant Governor of that Island. The recommendations of the Royal Commissioners were approved by the Secretary of State, the existing boards or committees were abolished and a new body was created on the 6th September 1837. This new Committee of Government Charitable Institutions and Government Charities consisted of three members and was invested with all the duties possessed by the suppressed authorities. The result of this change was to delay for another century the attainment of administrative independence by the medical services which continued to be managed on the same footing as other charities—which varied in nature from an orphan asylum and a public pawn-broker's to a Magdalen Asylum for penitent prostitutes, a prison and the maintenance of distressed Maltese abroad and of distressed British seamen in Malta.[6]

On the 1st January 1849, in addition to the Committee of Government Charitable Institutions and Government Charities, an Inspector of Charitable Institutions and Prisons was appointed by the Secretary of State to supervise the discipline and economy of the various establishments under the control of the department.[7] The Inspector was responsible to His Excellency the Governor and was to see that the intentions of government were carried out, the object being 'to improve the condition of the poor by the better organisation of the institutions devoted to the benefit of that class of the population and further to enforce a system of economy'.[8] In 1851 the Committee of Government Charitable Institutions and Government Charities was abolished and replaced by another board called the Commissioners of Charity, while in 1858 the office of Inspector of Charitable Institutions and Prisons was substituted by that of Comptroller of Charitable Institutions. The first to fill this post was Mr. (afterwards

---

[5] Government Notice of 30th July 1824, *Malta Government Gazette*, 24th August 1824, p. 4019.

[6] Government Notice of 27th December 1837, *Malta Government Gazette*, 27th December 1837, p. 456. Minute Book from 13th September 1837 to 27th June 1843, fols. 1 and 6, Medical & Health Archives, Valletta.

[7] Seddall, H., *Malta: Past and Present*, London, 1870, p. 248.

[8] Government Letters to Inspector of Charitable Institutions and Prisons 1848–1852, letter of 20th December 1848, no pagination, Medical & Health Archives, Valletta.

Sir) Ferdinand V. Inglott who very ably directed the department under his charge until 1870. From then on the Charitable Institutions followed a stable administrative pattern that lasted, with few modifications, until the third decade of the twentieth century.

Regulations were published in 1851 for the guidance of the Comptroller and the Commissioners. The Comptroller was responsible to the government for the good order and economy of the institutions under his care. He was under the immediate orders of the Governor through the Chief Secretary to the Government to whom he submitted all reports and communications. Among other duties he had to frame an annual report on the working of the institutions to be laid before the Charity Commissioners for transmission to the government. He was debarred from interfering with the professional treatment of the patients but he was authorised to suggest any course of action which he deemed to be beneficial to the sick.[9]

The Commissioners' duties included the submission of recommendations with regard to the financial needs of the institutions; the hearing of appeals from officers and employees against the decisions of the Inspector; the selection of candidates for appointment to vacancies occurring in the department and the consideration of all applications for out-door medical relief and for admission into the Poor House. They met once a week in the office of the Inspector of Charities.[10]

We will now consider how the medical services fared through these administrative changes. As early as the seventeenth century economy became the guiding principle of management of the public charities. It has already been seen how in 1631 the Ordinary Council of the Order had condemned the practice of maintaining a Women's Hospital on account of the added expense that this entailed on the Order's Treasury and how in 1655 the Council's decision to close this hospital was put into effect. The need for stringent economy made itself felt with added force towards the close of the eighteenth century when the Treasury became impoverished. Expenditure was curtailed but in spite of the savings effected the cost for the upkeep of hospitals, the maintenance of foundlings and the distribution of alms in 1796 was no less than £12,000—a sum representing the second heaviest item in the government expenditure, the Marine taking first place with almost double that amount.[11]

In the following century the Royal Commission of 1812 found that the expense of hospitals had increased by an 'extremely large' amount. There was very little system for the control of revenue in the various departments.[12] The administrators of the public charities were reluctant to give in their accounts to the Treasury and suspicions of negligence on their part were aroused when four years elapsed without any statements being submitted. The Commission urged strong action to remedy such abuse. They held that the one hundred and thirty salaried persons employed in hospitals were too many and estimated that half this number would be amply sufficient for the execution of the work required; consequently they proposed that vacancies should not be filled until the number of employees had been reduced to eighty.[13]

---

[9] *Instructions for the Guidance of the Inspector of Prisons and Charitable Institutions*, Malta, 1851.

[10] *Instructions for the Guidance of the Commissioners of Charity*, Malta, 1851.

[11] Webster, W. B., *English Governors and Foreign Grumblers*, Malta, 1864, p. 59.

[12] *Ibid.*, p. 24.

By the mid-century the principle had been established that no one could claim admission into the hospitals and asylums as a right and each case was investigated financially before admission into the hospital was sanctioned. Frugality was the hall-mark of institutional life and as long as the most fundamental needs of the inmates were satisfied, it was felt that all requirements had been fulfilled. At the 'Ospizio' or Poor House, for instance, blankets were provided but no bed-sheets; footwear was issued to only a few inmates even in winter; owing to the small number of servants employed nearly all the manual work of the institution was done by the inmates themselves; and yet they were provided with only one meal a day at eleven in the morning consisting of a plate of vegetable soup with *pasta*, twenty ounces of bread, three-and-a-half ounces of meat, two ounces of cheese or olives, one piece of fruit and half a pint of wine.[14] The same scale of diet was given to the mentally sick at Villa Franconi. The Visiting Physician of this asylum tried unsuccessfully to obtain an increase in the quantity of food and to introduce a more varied diet for his patients but the Inspector of Charitable Institutions maintained that mental patients were not to be regarded as sick persons.

Conditions were better in the two civil hospitals of Valletta. Food was more abundant and varied but the professional staff were handicapped by the lack of surgical instruments. To these and other defects, such as bad ventilation, inadequate nursing staff and overcrowding, the medical profession did not fail to draw the attention of the public and of the government through the medium of the Medical Society of Encouragement.[15] There was a time when unsatisfactory hospital conditions discouraged even the indigent from availing themselves of institutional treatment; in fact they sought admission only when the disease had become incurable or on the approach of death. These circumstances led to the establishment of a system of outdoor medical relief so that the sick poor who preferred to remain at home were not left without assistance. This scheme worked out very satisfactorily from the government's financial point of view as it resulted in 'great economy by thinning very considerably the population of the hospitals'.[16]

---

[13] *Report of His Majesty's Commission for enquiring into the affairs of Malta*, 1812, p. 142.

[14] *Storia della Società Medica d'Incoraggiamento*, Malta, 1845, p. 156.

[15] *Ibid.*, pp. 193 and 199.

[16] Miscellaneous Letters Issued from 7th January 1859 to 1st July 1867, fol. 306, Medical & Health Archives, Valletta.

By 1864 the Charitable Institutions came to form the biggest single item of expenditure in a national budget of over £148,000. Financial assistance to the poor amounted to £3,880 and hospital expenses to £14,150 exclusive of salaries of employees; when these are taken into account the whole sum voted for public charities exceeded £23,000—that is one-sixth of the whole revenue of the Island. Expenditure continued to rise and, at times, to surpass the vote by many hundred pounds a year. In order to keep expenses within bounds, admissions into hospital were, in 1869, restricted to acute cases only, while the two medical officers of the Gozo hospitals were burdened with the clerical work of the charitable institutions of that Island. The Comptroller protested against this innovation but had no option except to carry out the government's order—an order, he said, which was issued 'in accordance with the all prevailing sentiment of economy, but, I regret to say, not in the true interests of the Charitable Institutions'.[17] The length to which economy was stretched is amazing. In 1872 with a view of saving the cost of new linen bandages and reducing as far as possible the consumption of lint at the Central Hospital the practice was introduced of collecting old linen articles of clothing and bedding from the other institutions and forwarding them to the Central Hospital to be used for surgical dressings. By March 1873, however, great difficulty was experienced in meeting these demands owing to the fact that the wear and tear of linen articles was not on such a scale as to supply the requirements of the Central Hospital, of the Government Dispensaries and of the prisons. To find a way out of this difficulty the practice was gradually evolved of condemning as unserviceable, linen articles which were actually fit for use. The Comptroller in an endeavour to stop this abuse acquired the necessary old linen for surgical dressings from institutions in England.[18] This was not the only instance when, for the sake of economy, second-hand items of clothing were bought for the institutions. One also finds recorded the acquisition of quantities of discarded military greatcoats from the army and from dealers in London for the use of the inmates of the Charitable Institutions.[19]

In the last two decades of the nineteenth century an effort was made to reduce expenditure on drugs to the lowest possible limit but it was found, to the government's dismay, that it was 'impossible to resist the demands of the medical officers for appliances and medical comforts without impairing the efficiency of the patient's treatment'.[20] Although the humanitarian aspect was never ignored by bureaucracy, one cannot avoid the impression that economic considerations were no less strong. This impression is strengthened by the reasons brought forward by the Comptroller when making a request to the government to buy a proprietary medicine for a tuberculous patient in one of the hospitals under his charge. The drug was expensive and the cost incurred for drugs was already high but the Comptroller felt that he had to recommend this added expenditure because if the patient did not recover he was likely to remain a burden on the government with the consequence that 'his cost would in that case be higher'.[21]

---

[17] Register of References to Comptroller of Charitable Institutions, vol. ix, fol. 10, Medical & Health Archives, Valletta.

[18] Letters to Government from 31st January 1872 to 11th June 1878, fol. 371, Medical & Health Archives, Valletta.

[19] Miscellaneous Letters Issued from 22nd November 1888 to 7th June 1892, fol. 371, Medical & Health Archives, Valletta.

[20] Letters to Government from 20th April 1888 to 8th April 1895, fol. 72, Medical & Health Archives, Valletta.

Apart from financial hurdles the Comptroller had to overcome two other obstacles, the provision of adequate office accommodation for himself and his staff and of means for the conveyance of patients from their homes to the various hospitals. For many years the conditions under which the clerical staff had to work in the office of the Charitable Institutions were appalling. It appears that the first office of the Inspector was at No. 4 Zachary Street, Valletta. It was still there in January 1859 but some years later it was moved to the Governor's Palace.[22] These premises were in an 'unhealthy state as, besides the inconvenience arising from the want of space, the rooms were damp, ill-ventilated and subject to extremes of heat and cold'. There was not even proper provision for the preservation of public documents; in fact there was hardly enough room for the clerks themselves and the public while part of the floor, being boarded, harboured cockroaches and mice 'in considerable numbers'. The Comptroller, Mr. F. V. Inglott, had been on the look-out for better premises since he first occupied the post but he never succeeded in finding more suitable offices in Valletta or Floriana.[23] Things worsened as time went on. Inglott's successor complained that the furniture in the office was in a dilapidated state and had become so mouldy 'that not only the books and important plans and records' of all the Charitable Institutions were being ruined but the health of the clerks was also being affected as they were 'suffering from rheumatism and other complaints caused by the unhealthy state of the premises'.[24] The office was dark and dull and damp besides being 'subject to unbearable smells and dizzy noises' originating in the nearby market and Palace stables. In 1880 the Comptroller pleaded that his health had become impaired by these conditions and, in the hope of attracting some sympathy and attention to his repeated entreaties, he took the liberty in October 1882 to forward to His Excellency the Governor his 'office chair for inspection to show what the damp had caused in it since a few months';[25] but even this bold step failed to produce the much needed improvements. A move to rooms in the Auberge d'Italie in December 1883 and to the premises hitherto occupied by the recently abolished Sanitary Office in March 1885 was hoped for[26] but it was not until June 1886 that the department was finally transferred to the more spacious building of the 'Monte di Pietà' in Merchants Street[27] where it remained until it merged with the Public Health Department in 1937. In that year Ordinance XXX abolished the post of Comptroller of Charitable Institutions and replaced it by that of Chief Government Medical Officer who was made responsible for the administration of the hospitals and other medical services. The new combination, known as the Medical and Health Department, was given offices in the Castellania, or old Law Courts of the Order of St. John, in the same street.

---

[21] Letters to Government from 20th April 1888 to 8th April 1895, fol. 225, Medical & Health Archives, Valletta.

[22] Miscellaneous Letters Issued from 7th January 1859 to 1st July 1867, fol. 1, Medical & Health Archives, Valletta.

[23] Letters to Government from 5th March 1869 to 31st January 1872, fol. 78, Medical & Health Archives, Valletta.

[24] Letters to Government from 31st January 1872 to 11th June 1878, fol. 292, Medical & Health Archives, Valletta.

The problem of transporting patients from their homes to hospital did not find an easy solution. Up to the eighteenth century the sedan-chair and the '*calesse*'—a two-wheeled carriage used for ordinary public transport and drawn by a mule or donkey—were the means of transport employed but by the mid-nineteenth century more adequate arrangements became necessary. The population of Malta numbered over 100,000 souls and was scattered over a relatively large area so that patients suffered great hardships and inconvenience when they had to be carried on animal-drawn carts or in rowing boats across the harbours or on some improvised litter carried by bearers on foot over rough roads for a distance of perhaps eight or ten miles. This problem formed the topic of a discussion held at a meeting of the Medical Society of Encouragement on the 19th August 1848. The majority of the members tried to solve it by proposing the establishment of three additional hospitals in the countryside preferably at Mdina, Zejtun and Naxxar. Others favoured the provision of a single hospital situated at Floriana near the Capuchin Convent thus bringing it within easier reach of the country people.[28] The first proposal was impracticable on account of the expense involved and the second one would have been ineffectual in eliminating the distances involved.

Ambulances were used by the military authorities in Malta at least as early as 1865—and most probably earlier—but practical steps to tackle the problem of the transportation of the civilian sick were only taken by government in 1868.[29] In that year the Comptroller obtained a model of a litter (called '*cataletto*' in Italian) used by the 'Confraternità della Misericordia' of Florence for the removal of the sick from their homes to hospital. This litter was covered with a hood and was so constructed as to ensure a constant supply of fresh air to the patient without exposing him to a draught. It was furnished with a horse-hair mattress, sheets, blankets and woollen pillows;[30] but since this litter had to be carried by bearers travelling on foot the patient still had to endure the hardships and dangers of a long journey to hospital. It is not to be wondered at, therefore, that owing to this slow and awkward mode of progression the sick sometimes died on the way and were found corpses when the litter was uncovered at the hospital.[31] The inefficiency of this means of transport became evident during the smallpox epidemic of 1871.[32]

---

[25] Letters to Government from 1st July 1878 to 22nd March 1883, fol. 509, Medical & Health Archives, Valletta.

[26] Letters to Government from 23rd March 1883 to 20th April 1888, fol. 77, Medical & Health Archives, Valletta.

[27] *Ibid.*, fols. 250 and 449.

[28] *Storia della Società Medica d'Incoraggiamento*, Malta, 1845, pp. 203 and 206.

[29] Bernard, L., *Sull'utilità e sulla necessità della chirurgia*, Malta, 1866, p. 17.

In August 1883 the Comptroller suggested the purchase of a small horse-drawn ambulance similar to those then used by the army but it was not until November 1885 that a '*porte civiere*' was brought from Antwerp. Unfortunately this carriage proved to be too heavy besides causing a jolting movement to the sick on rough and uneven roads. It was also difficult to control the vehicle in steep streets and so it was decided to restrict its use for the transport of patients from such relatively level districts as Hamrun, Pietà and Marsa. The Police Station at Portes des Bombes, near the gates of Floriana, was used as its depot.[33]

Besides the '*porte civiere*' experiments were also made with locally manufactured stretchers but these turned out to be unsightly, cumbersome and uncomfortable. In 1891 four 'ambulance litters', of the type approved by the Hospitals Association at a general competition held in London at St. Batholomew's Hospital, were acquired from London. They were fitted with rubber-tyred wheels and water-proof covers. They proved so satisfactory that more of them were later ordered to replace the older stretchers.[34] The transport problem, however, was never really solved until 1927 when motor ambulances were first provided by the Maltese Ministry of Health.[35]

[30] Miscellaneous Letters Issued 1867–68, fol. 29, Medical & Health Archives, Valletta.

[31] Register of References to Comptroller of Charitable Institutions, No. 12, fol. 28, Medical & Health Archives, Valletta.

[32] Letters to Government from 31st January 1872 to 11th June 1878, fol. 40, Medical & Health Archives, Valletta.

[33] Letters to Government from 23rd March 1883 to 20th April 1888, fols. 46, 399 and 600, Medical & Health Archives, Valletta. Register of References to Comptroller of Charitable Institutions, No. 28, fol. 119, Medical & Health Archives, Valletta.

[34] Letters to Government from 20th April 1888 to 8th April 1895, fols. 434, 592, 617 and 787, Medical & Health Archives, Valletta.

[35] *Malta Government Gazette Supplement*, 7th July 1927, p. vii.

PART III

UNDER THE AEGIS OF THE ORDER OF ST. JOHN

CHAPTER 12

The Great Siege of 1565

FROM the most remote periods of the history of the Mediterranean basin, Malta and the sea around it have formed the focal point in the many struggles among the nations that have aimed at the domination of that sea. Of these episodes of warfare, the Great Siege of 1565 had strong repercussions over the political and religious development of Western Europe. The sixteenth century saw the rapid rise of the Ottoman power in the Mediterranean and the birth of Turkish aspirations to invade and dominate Europe. Their ambition, however, could not be realised until they had wrested Malta from the Knights of the Order of St. John and could use it as a base from which to attack the shores of southern Europe. Turkish corsairs had often swooped down on the Island but their really serious attempt to capture it was made in 1565. They besieged Malta for four months from the 18th May to the 8th of September. It has been estimated that the number of men engaged in the struggle was 90,000 on the Turkish side and 9,100 on the Maltese side together with a civilian population of well over 22,000 souls.[1]

This siege was the first medical emergency on a national scale which Malta had to face. Three hospitals were then in existence. One of them was Santo Spirito Hospital, at Rabat, which then consisted merely of a small church containing only four beds. Apart from its inadequate accommodation it was beyond the reach of the defenders as it was in the open country which was in the hands of the Turks. The second hospital was that kept by the Italian Knights in their auberge at Birgu. We do not know what was its bed complement but it could not have been of any great size. The third hospital was the Holy Infirmary, also at Birgu. It was well equipped according to the standards of the time but owing to its situation on the foreshore of the town facing Salvatore Hill, which was in the hands of the invaders, it was very vulnerable to enemy attacks. Its vicissitudes during this struggle form one of the most dramatic episodes that any hospital can offer.

From the very outset of the siege the Holy Infirmary came within range of the Turkish cannon fire and soon found itself in one of the fiercest and most dangerous battle areas of the war. The bastions defending the infirmary were so severely damaged that the Turks nearly succeeded in advancing into the town and capturing the hospital. The ranks of the defenders had become so depleted that Grandmaster Jean de la Vallette decided to induce as many of the infirmary patients as possible to return to the fight in spite of their wounds. He, therefore, went to the hospital and ordered all the walking patients to assemble in the Great Ward. When they were gathered there he showed them the wound that he himself had sustained in his leg and said that he too needed rest and treatment for his injury but realising the gravity of the situation he had resolved to die fighting rather than wait to be slaughtered in the infirmary by the advancing enemy. His words had the desired effect for all those who could carry themselves went to the nearby ramparts to join the defenders and only the dying and the bed-ridden remained in the infirmary. Their sacrifice was not in vain for the invaders were eventually thrown back and the hospital saved.

---

[1] Cassar, P., 'Psychological and Medical Aspects of the Siege of 1565', *Melita Historica*, 1954, i. 129.

As the struggle became fiercer the number of casualties brought to the infirmary was so great that it was soon unable to cope with them so that by the 6th June the patients were being distributed among the various auberges in the town. The position remained grave and in the last week of this month the Grandmaster issued a proclamation ordering the evacuation of a number of private houses in Birgu which were turned into emergency hospitals. Subsequent events fully justified this measure. In fact there were instances when the number of casualties needing treatment was four hundred in a single day, while on one occasion as many as six hundred men were wounded in one day. Before the beginning of the siege, stores of medicinal drugs had been laid aside but they had become very scarce by the beginning of August so that wounded men were dying as a result of the scarcity of medicaments. To make matters worse a boat loaded with medicinal preparations, which was dispatched from Sicily, never reached Malta as it was captured at sea by the Turks.

Whether some form of anaesthesia was employed during operative procedures in Malta at this period is unknown. A few primitive methods of preventing pain had, however, been evolved by this time in Europe. There was the narcotic sponge which after soaking in a solution of mandrake, belladona and other drugs was pressed over the mouth of the patient who by sucking the solution lost consciousness and fell into a deep sleep. The hammer-stroke was also practised. The patient's head was encased in a sort of helmet on which the surgeon delivered a good blow with a wooden hammer in such a way as to stun the patient into insensibility and thus enable him to go through the operation without suffering any pain.[2] It is not improbable that surgeons working in Malta were familiar with these methods of anaesthesia and that they made use of them. Wounds were cleaned and washed with salted water as a first aid measure. Splinting and traction were employed in the treatment of fractures; broken skull bones were treated by elevation of the depressed fragments and trephining was resorted to when necessary. Wounds involving soft tissues were sutured and severed blood vessels were ligatured as the tying up of bleeding arteries and veins had begun to replace the cautery as a haemostatic. The wound was then dressed with tow or wool. In injuries of the mouth which rendered the intake of food difficult or impossible, the necessary nourishment was administered by means of nutrient enemas.

---

[2] Parenti, G. C., 'Leggende e nozioni sull'evoluzione dell'anestesia', *Gazzetta Sanitaria*, Milan, 1951, 72.

The pharmacological treatment of wounds was not advanced. While the surgeon aimed at closing the wounds without producing scarring, the means he employed to achieve this end were still based on the misconceptions of Hippocrates, Galen and Avicenna. It was thought that the healing process depended upon the 'natural heat' of the body and the degree of 'humidity' and 'softness' of the part hurt. As a result of these ideas various substances, to which different degrees of humidity and astringency were attributed, played a great part in the treatment of wounds. White of egg, black wine, oil of roses and 'digestive' of turpentine were used for dressing wounds in the form of ointments, cataplasms and emplastra. With our present knowledge of sepsis it is natural to expect that the use of such forms of treatment promoted infection and led to fatal results; yet there were patients who survived these methods of wound dressing and many who were thus treated at the Holy Infirmary recovered from their injuries to such an extent that following their discharge from hospital they returned to combat duties.

Of the Turkish medical organisation during the siege we know very much less than we do about the Order's services. The Turks set up their main camp at the Marsa where they also established their hospital and their cemetery. The wounded and the sick were accommodated in huts erected among the trees. Thousands of casualties passed through this field hospital. It has been estimated that by the 24th June about one-fourth of the Turkish army was lying ill or wounded. The sick who had no prospects of returning to the fighting lines were evacuated from the Marsa hospital by sea to Tripoli. The transport of casualties to this base, however, was not effected smoothly, for the speed of evacuation of the patients did not keep pace with the rate of illness and injuries. To make matters worse for the Turks, the Marsa hospital was attacked and overrun by the Order's cavalry. The Turkish guards were taken by surprise and the cavalry invaded the hospital encampment causing havoc and death among its occupants. 'Those who were lying almost dead in their beds', wrote a historian, 'and who a little while previously were feeling so weak that they could hardly support themselves on their legs fled from the scene with such speed as if they had never been ill and ran away as swiftly as healthy men.'[3] The Turks reorganised their Marsa hospital but it eventually became so crowded that some of the galleys at anchor in Marsamxett

---

[3] Bosio, J., *Dell'Istoria della Sacra Religione et Ill.ma Militia di San Giovanni Gerosolimitano, Parte Terza*, Roma, 1602, p. 629.

Harbour were adapted as hospitals. The poops of the galleys were reserved for the Turkish troops while the sick Christian slaves were made to lie among the benches of the oarsmen; but even this measure afforded only a short respite as the galleys, too, soon became filled with patients. Not only the hospital organisation but also the transport of casualties from the battlefield to the Marsa hospital broke down at this period, and the wounded were only conveyed as far as the ordinary camps while many of them were not even picked up from the trenches where they were abandoned to die.

It must be realised that the Turks had a more formidable problem to solve than the Knights of St. John for, apart from numerous surgical cases, they had to contend with the widespread occurrence of infectious illnesses among the troops. The Marsa, where they were encamped, enjoyed the reputation of being a very unhealthy area, notorious for its 'pestiferous atmosphere'; moreover, the water springs and cisterns of that area and other parts of the Island occupied by the Turks were poisoned by the Order's Physician-in-Chief on instructions from the Grandmaster. The poisonous concoction was made up of hemp, wheat, arsenic and other ingredients. The mortality ascribed to this water-poisoning was considerable until the Turks detected its nature and decontaminated their water supplies.

Illness first appeared among the Turkish troops soon after their landing on the Island. Dysentery caused havoc among them while later on 'putrid fevers' also claimed many victims. It is impossible to determine what these fevers were as no description of the illnesses has come down to us. Whatever their nature, they prevailed throughout the duration of the campaign and threatened to decimate the Turkish soldiers. In an age when no one knew how infectious diseases were propagated and how their spread could be prevented, it is not surprising to learn that in an army of 90,000 men illness should take a heavy toll. The occurrence of disease was then ascribed to atmospheric changes such as the diurnal heat and the nocturnal humidity of the Maltese summer, the poisoning of the air with the odours of excreta and the emanations from the many unburied and hurriedly burned corpses that littered the battlefields, and the scarcity of wholesome water.

On the 7th September part of the relieving army sent from Sicily to help the besieged disembarked at Mellieha and the Turks retreated to their ships and sailed away from Malta six days later.The problem of sickness increased for the Order at this period when the men of the Sicilian relief force started falling ill. The sick were so numerous that they could not be housed in the Holy Infirmary alone and many of them had to be accommodated in private houses. This outbreak had not been unexpected. The Knights had been so impressed by the havoc wrought by disease among the Turks that the Grandmaster had prohibited the Sicilian forces from encamping anywhere in the areas previously occupied by the Turks. He feared that the areas in which large numbers of Moslems had sickened and died would become the foci of a vast epidemic if they were to be occupied again by a large body of troops. In fact signs were not wanting to arouse anxiety of an impending outbreak of pestilence; the dogs that had been abandoned in the countryside at the beginning of the siege had run wild and not finding enough to eat in the deserted villages and farms started disinterring the badly buried corpses and eating their flesh. Another alarming occurrence was the invasion of Birgu by such considerable numbers of flies that the inhabitants could not defend themselves from these insects until in the end it was found necessary to destroy them with gunpowder fire. In spite of such insanitary conditions the much dreaded epidemic never broke out.

CHAPTER 13

The Naval Medical Service

CONDITIONS ON BOARD

THE Order of St. John first began to explore the potentialities of sea enterprise in 1292 after the brotherhood took refuge in Cyprus.[1] It rose to a first class maritime power towards the beginning of the fourteenth century following its settlement in the Island of Rhodes. By the time the Knights came to Malta two centuries later their navy had evolved into a highly efficient organisation.

In medieval times—and even later—the Mediterranean basin was sharply divided between Christian and Moslem; and each side considered it a religious obligation to fight the other whenever and wherever they met. In this ceaseless warfare the Order was quick to realise that on the command of the central and eastern Mediterranean depended not only the military security of Malta but also the insurance of an adequate supply of food for the inhabitants. It is understandable, therefore, that with the expansion of its activities the navy claimed the heaviest expenditure in the budget of the Order.[2]

The highest officer in the naval hierarchy was the Grand Admiral who was the Pilier or head of the Italian Langue. Subordinate to him was the Captain General of the Galleys (equivalent to the modern vice-admiral) who was entrusted with the immediate effective control of the fleet. Under him were the Captains in command of the various vessels.

Until the close of the seventeenth century the largest and swiftest unit of the fleet was the galley, a long narrow ship that drew little water, driven by oars and designed for the grappling and boarding tactics then in favour. As these vessels were of slender build they did not usually venture out into the open sea during the winter months. With the approach of spring and summer, however, they commenced their cruises in pursuit of Barbary corsairs and Turkish warships or else joined the fleets of Christian powers in their frequent expeditions against Moslem-held strongholds in the Eastern Mediterranean. The ship's complement consisted of thirty to thirty-five knights and two hundred soldiers besides technical officers, artificers and mariners. The motive power was supplied by oarsmen—some three hundred and forty of them—who were either slaves, convicts or mercenaries who sold themselves as rowers and who were known as '*buonavoglie*'.[3] The importance of having medical men on board to look after the health of this mass of men was duly recognised and the posts of physician, surgeon, assistant surgeon and barber formed part of the ship's permanent company so that the case never arose, as was happening for instance in the British Navy as late as the close of the eighteenth century, that a warship went 'into battle without one (surgeon's) assistant on board . . . not one to screw a tourniquet, to tie an artery, to hold a shattered stump, to put a piece of lint on a bleeding wound'.[4]

---

[1] Vassallo, G. A., *Storia di Malta*, Malta, 1854, p. 283.

[2] Eton, W., *Authentic Materials for a History of the Principality of Malta*, London, 1807, p. 68.

A cruise or expedition lasted for weeks or months and the medical personnel had to face more than one peril during the voyage. Besides the hazards of shipwreck and the chances of battle, they ran the grave risk of falling prisoners into Moslem hands and being carried into slavery somewhere on the shores of North Africa or as far away as Constantinople. The fate of medical personnel in captivity, however, was not as cruel as that of other Christian slaves for thanks to their usefulness as professional men they received better treatment at the hands of their masters. Adventurous episodes, culminating in the regaining of their freedom, occasionally brought to a happy ending a long period of captivity. A case in point is that of a surgeon Claudio Camilleri who was captured by the Turks while serving in the Order's navy. Camilleri, while a slave, became the personal surgeon of the Commander of the Turkish Galleys of Rhodes, Mustapha Basha, on board the flagship *Lupa*. Owing to his professional status he enjoyed the privilege of remaining unchained unlike his fellow slaves. Mustapha was so satisfied with the Maltese surgeon's services that for many years he obstinately refused to allow Camilleri to ransom himself. No wonder, therefore, that the surgeon grasped the first opportunity to escape to liberty. The chance came in the early weeks of 1784 when, together with other Maltese slaves on board the *Lupa* he took part in a rising of the Christian captives. Having overpowered their Turkish masters, they took possession of the ship which they succeeded in conducting to Malta with Mustapha Basha himself as prisoner.[5]

Apart from the dangers arising from misadventures at sea and encounters with the enemy, the life of a medical man on board was no bed of roses. The construction of the warship of those days militated against the provision of good sanitary conditions. Cramping of accommodation was inevitable in a ship with very low sides and with a shallow hold. The galley was only 55 metres long and 14 metres wide. Certain elementary hygienic measures were not neglected such as the daily sweeping and washing of the deck, the cleansing of the hen-coop and animal pens[6] and the provision of separate drinking vessels for members of the crew suffering from 'diseases of the mouth';[7] but no attention was paid to the need for adequate living and sleeping space. The captain and officers were crowded in the poop and the sailors in the prow. The oarsmen or galley slaves lived and slept on their benches exposed to the heat of the sun by day and the dampness of the night on an open deck. They were chained to their rowing benches each of which was about ten feet long and four feet wide; some seven men were thus packed on each bench day and night for weeks and months on end.[8] Hygienic conditions worsened when booty and prisoners were taken as they made fresh demands on an already overcrowded ship. Sometimes room had to be found for women captives and occasionally also for women in labour when enemy vessels carrying Moslem pilgrims and passengers were captured. The situation became repulsive when these captives suffered from contagious skin diseases such as ringworm of the scalp which was very common among the crews of the Barbary corsairs;[9] but even in the absence of such extreme conditions there was hardly anything that would to-day be called comfort on board. In fact a Maltese church dignitary of the seventeenth century records that in his time when someone wished to denote a scene of horror and confusion he referred to it as like being on board a galley.

---

[3] Rossi, E., *Storia della Marina dell'Ordine di San Giovanni di Gerusalemme*, Rome, 1926, p. 65.

[4] Ballingall, G., *Outlines of the Course of Lectures on Military Surgery*, Edinburgh, 1833, p. 25.

[5] Agius de Soldanis, 'Relazione della valorosa impresa effettuata dai Cristiani schiavi su la galera Lupa', *Malta Letteraria*, 1931, ii. 262.

Lice and bugs contributed to the misery of life at sea.[10] It would, however, be a mistake to think that the harbouring of insects was the exclusive privilege of the seaman; that these insects sometimes claimed more aristocratic hosts on land is shown by the fact that Grandmaster Emmanuel Pinto was swarming with lice on his deathbed.[11] Fortunately the custom of shaving the heads of slaves and oarsmen, though not primarily meant as a hygienic measure but as a sign of servitude, helped to combat lice infestation which seems to have been the scourge of all navies and which was responsible for frequent epidemics of typhus, then commonly known as ship-fever. Even in those fleets where the galley-slave was unknown, as in the British Navy of Charles II, seamen fared just as badly. Indeed the Rev. Henry Teonge, the chaplain on board H.M.S. *Assistance*, has recorded in his diary under the date of the 22nd March 1679, that a member of his crew was 'eaten to death with lice.'[12] It was only when sails replaced oars as a mode of propulsion that the galley fleet began to be superseded—though never completely so—by more roomy and healthier ships. This was at the beginning of the eighteenth century when Grandmaster Ramon Perellos y Roccafull, following the examples of France, England and Holland, founded a squadron of frigates or sailing men-of-war.

---

[6] Archives 1763, fol. 140, Royal Malta Library.
[7] Manuscript 173, fol. 170, Royal Malta Library.
[8] Currey, E., *Sea Wolves of the Mediterranean*, London, 1910, p. 223.
[9] Archives 1770, fol. 304, Royal Malta Library.
[10] Cagliola, F., 'Le disavventure marinaresche', *Malta Letteraria*, 1929, iv. 123.
[11] Manuscript 1146 (ii), fol. 212, Royal Malta Library.
[12] Teonge, H., *The Diary of Henry Teonge*, London, 1825, p. 293.

To reduce the chances of outbreaks of disease on board, passengers suffering from venereal illnesses, 'contagious' and 'incurable' diseases—as then understood—were not allowed to embark on the Order's ships.[13] The most dreaded calamity that could strike a ship at sea was the appearance of the pest or plague. When this disease broke out on board, the ship found herself at the mercy of the winds and waves on account of the disorganisation of its motive power brought about by the morbidity and mortality among the rowers. Even if, in spite of her disablement, she managed to limp into a Christian port she hardly expected to receive any succour beyond provisions, for the sanitary authorities, dominated by the horror and fear of 'contagion', would compel the ship to put out to sea again.[14] To minimise the risks of such a catastrophe the Captain General of the squadron had strict orders from the Grandmaster and Council to keep his ships at a safe distance from those of other navies afflicted with 'contagious' diseases and to avoid all occasions likely to carry the infection to his squadron.[15] It was the practice, in such an emergency, to appoint a knight on board each galley as a Sanitary Commissioner to ensure that none of the crew landed in places suspected of being infected and that his ship did not approach vessels harbouring the 'contagion'.[16] The Captain General was even empowered to abandon his allies when the infection on their ships was of such virulence and extent as to destroy all hopes of an effective action against the enemy[17] as, in fact, he was compelled to do in 1687 when in conjunction with the Papal fleet he kept his ships away from the Venetian navy during their combined operation against the Turks in the Levant.[18]

An instance of the type of medical cases dealt with during a cruise is afforded by the following extract from the report of the Physician to the Galleys drawn up in October 1646 at the close of the campaign for the liberation of Canea. During this expedition, he wrote, 'ten officers, two "buonavoglie" and six slaves died of fevers some of which were of a continuous type while a few were of a malignant nature. All of them, however, soon disappeared. At present there are seventeen men, five officers and twelve oarsmen . . . suffering from continuous tertian fevers but without any grave symptoms. Such is the state of health of the navy of this Holy Religion after the hardships endured in this long voyage.

---

[13] Manuscript. Statuti della squadra dell'Ordine Gerosolimitano, fol. 74. Property of Dr. J. Darmanin Demajo.

[14] De La Gravière, J. P. E., *Les Chevaliers de Malte*, Paris, 1887, p. 69.

[15] Archives 262, fols. 197 and 245, Royal Malta Library.

[16] Dal Pozzo, B., *Historia della Sacra Religione Militare di S. Giovanni*, Venezia, 1715, vol. ii, p. 169.

[17] Archives 1767, no pagination, Royal Malta Library.

[18] Dal Pozzo, B., *op. cit.*, p. 640.

Thanks to Divine assistance and the protection of the glorious St. John the Baptist the navy has been preserved from the great infirmities that have struck the Venetian and Papal galleys although the mortality in these two navies was caused more by the little charity shown to the poor patients and by the absence of things necessary for their well-being than by the virulence of their maladies. Indeed their sickness was due more to the bad quality of the food and the filth which surrounded them than to any other cause.'[19]

The Order's medical staff was not always so fortunate in warding off the onslaught of disease. In 1560 a malignant fever swept through the galley fleet with such intensity that, after the loss of many officers and men, the ships were evacuated and thoroughly washed with vinegar—a substance to which great disinfectant powers were attributed.[20] In 1658, while the galleys were in Messina awaiting the arrival of the Papal fleet to go to the aid of the Venetian Republic, over one thousand men fell sick from an 'influenza of fevers' and had to be taken ashore to be cared for in emergency hospitals. Years afterwards during a cruise to Spanish and Italian ports in 1679, the Order's galleys were reduced by 'malaria' to such a miserable state as to become, in the words of the official historian, 'hospitals and cemeteries'.[21] In the winter of 1684 all the efforts of the physicians and surgeons proved unavailing against the deadly fever that ravaged the fleet during the attack on Prevesa on the gulf of Arta in Greece. As many as thirty men a day were struck down by this fever which carried off the most robust among them. Heavy rains and violent storms made the plight of the sick even worse. The situation became desperate and Divine help was invoked. The priors of the galleys ordered a general Holy Communion and special prayers were offered for three evenings in succession. Many believed themselves under the spell of some malediction and attributed their misfortunes to Divine wrath for having plundered some Greek churches on enemy territory. The General of the Galleys seems to have shared this belief for by means of exhortations and threats he managed to secure the restitution of the sacred vestments and other articles seized by his sailors and soldiers. Having collected the stolen material he returned it to the Archbishop of Corfu for distribution among the poorest churches of Greece. Following this gesture, the Order's historian informs us, the weather cleared and the fevers began to abate though not before the galleys had 'sown the earth and the sea with corpses' and filled the Holy Infirmary with the sick. A still greater calamity overtook the fleet in 1686 when, following the assault on Naples in Rumania, as many as one thousand and two hundred sick men were landed at the lazaretto on the ships' return to the Island, the losses incurred being so heavy that two galleys had to be laid up for want of crews.[22]

---

[19] Archives 1769, fol. 186, Royal Malta Library.

[20] De La Gravière, *op. cit.*, p. 69.

[21] Dal Pozzo, B., *op. cit.*, pp. 267 and 462.

[22] *Ibid.*, pp. 538 and 626.

Only on very rare occasions did the navy have respite from warfare. These short and infrequent lulls, however, were no periods of idle rest for the naval medical and surgical personnel, for at such times the navy might be summoned to render medical assistance to some neighbouring country stricken by sudden catastrophe. One of these major missions of mercy occurred in January 1693 when an earthquake destroyed the city of Augusta in Sicily. Although considerable damage was also caused in Malta by the earthquake, the Order's Government immediately dispatched five galleys to succour the inhabitants of the Sicilian town. When, in 1783, Messina and Reggio with the entire coast of Calabria suffered a similar fate, the Order's galleys were quickly on the spot laden with every article needed for the relief of the survivors.[23] The best surgeons of the Holy Infirmary embarked on the galleys taking with them twenty chests filled with medicines, two hundred beds and a great number of tents. While the knights distributed food for some 1,200 to 1,500 persons on the verge of famine, the medical teams toiled with the sick and wounded. An offer to set up a hospital ashore for the reception of five hundred patients was declined by the Neapolitan Government as the motive behind the merciful gesture of the knights was misconstrued by the Neapolitans as an interference by a foreign power in their internal affairs. They even went to the extent of protesting with the Grandmaster against the presence of the Order's ships at Messina as the Neapolitan Government had never asked for help—to which the Grandmaster replied that in tendering aid to His Majesty's subjects he had acted 'on the fundamental principles of the institution of the Order which in all times had made it their duty to hasten to the help of all Christians' who were in need of assistance and protection. His Majesty was satisfied with this declaration and he allowed the knights to pursue their humanitarian work unhampered by further political jealousies.[24]

FOOD

Though habits of frugality were encouraged among the knights when afloat, great attention was paid to the wholesomeness of the food on board ships. Among the scourges of seamen in the past, scurvy was the cause of severe and protracted sufferings. No distinct indication of the existence of this disease is encountered in the official returns of the medical casualties in the Order's fleet, but there can be little doubt that the allusion to the occurrence of 'diseases of the mouth' already mentioned refers to this deficiency disease. Scurvy, however, does not appear to have been a serious problem in the Order's navy. This is explained by the fact that the conditions responsible for its occurrence—long voyages and the absence of fresh provisions on board—were not operative; the Order's ships often touched friendly ports during their cruises and thus hardly ever lacked fresh food for any appreciable length of time. With the aim of securing fresh meat for as long as possible every galley, on leaving the port of Malta, was allowed to embark from four to eight head of cattle, forty to fifty rams and one poultry coop of fifty hens; during the voyage these fowls enjoyed the freedom of the deck where they roamed among the rowers' benches.[25] When these provisions were consumed the Captain was to provide the ship with another consignment of livestock from nearby ports.[26] Biscuits and other food supplies were carried by every galley to last for two months.

---

[23] De Boisgelin, L., *Ancient and Modern Malta*, London, 1805, vol. ii, p. 23.

[24] Doublet, P., *Mémoires historiques sur l'invasion et l'occupation de Malta*, Paris, 1883, p. 69.

When at sea the knights had three meals a day, the bill of fare including vegetable soup, meat, salads, eggs and fish.[27] The officers had a less varied diet, their main dish consisting of salted meat, preserved fish, vegetable soup and cheese. For the rest of the crew, vegetables, biscuits, oil and vinegar were available. Bread was issued at the rate of forty ounces daily per head. Wine was distributed to the rowers to 'refresh them' when they showed signs of exhaustion after a long period at the oars while cocoa was issued to them every afternoon.[28]

THE CARE OF SICK CREW

Unlike other maritime powers, such as Venice,[29] the Order did not possess hospital ships except for a very short period after the loss of Rhodes when the seven-decked carrack *Santa Maria* was temporarily fitted as a hospital for the sick and wounded. Each galley, however, had its own sick berth where members of the crew, passengers and captives were looked after and treated when ill. A German count, who came to Malta on one of the Order's galleys in 1614, has left us a record of his experiences as a patient in one of these wards. 'I lay ill on board . . . and they made me a bed amongst the Knights,' he states, 'one of whom was always carefully tending me and after meals two of them would come to make my bed afresh covering it with red damask and in the morning they did the same again. Besides this there was a Spanish priest doing duty on board and he used also to busy himself with me putting my pillows to rights if he saw my head was too low.'[30]

Before the food was distributed to the sick at meal times, the patients were made to wash their hands. They were then furnished with a spoon, a tumbler and a napkin—which sounds incredible in those unrefined days.

---

[25] Manuscript. Statuti della squadra dell'Ordine Gerosolimitano, fol. 74. Property of Dr. J. Darmanin Demajo.

[26] Archives 121, fol. 253a, Royal Malta Library. Archives 161, fol. 113, Royal Malta Library. Archives 1759, fol. 388, Royal Malta Library.

[27] Archives 1759, fol. 382, Royal Malta Library.

[28] *Ibid.*, fol. 356.

[29] Nani Mocenigo, M., *Storia della marina veneziana*, Rome, 1935, p. 16.

[30] Kraus, E., *Th Adventures of Count George Albert of Erbach*, London, 1891, p. 54.

The ward was perfumed with rosemary four times a day and sometimes also sprinkled with vinegar to neutralise its foul smells.[31] From one to two Christian slaves were detailed to attend upon the sick together with a nurse.[32] Moribund patients had their wills drawn up in the presence of the Prior by the ship's clerk who also took their belongings in his charge.

On the ship's return to Malta the sick were transferred to the Holy Infirmary on a ticket of admission signed by the surgeon or his assistant and the Captain of the galley.[33] Those seamen who, because of serious injuries or illnesses sustained during active service, were no longer retained in the navy were granted a pension and provided with a bundle of discarded uniforms on presentation of a certificate of disability by the ship's surgeon.[34]

THE PHYSICIAN TO THE GALLEYS

The Holy Infirmary served as the shore hospital of the marine and a close liaison existed between its professional staff and the medical men of the fleet. The Grand Hospitaller, as head of the infirmary, had no authority over the medical service of the navy which was administered by the Congregations (or naval boards) of the Galleys and of the Frigates. At first only the flagship had a physician on board but when the fleet was augmented to eight galleys in 1685 another physician was engaged so that each doctor had four galleys under his charge.[35] Each galley carried a surgeon, an assistant surgeon and two barber surgeons.[36] As the number of galleys and frigates in the Order's navy never exceeded ten,[37] the whole medical staff must have consisted, at the maximum, of two physicians, ten surgeons, ten assistant surgeons and twenty barber-surgeons. Previous to the founding of a medical school in Malta in the late seventeenth century, doctors from other lands came to the Island to seek their fortune and this circumstance explains why, for many years, most naval medical men were Italians or Sicilians. They began to be superseded by Maltese physicians and surgeons in the early eighteenth century.[38]

The physician's work actually started before the galleys set out on their voyage. Before their departure he paid a visit to the men of the fleet lying ill at the Holy Infirmary, accompanied by the medical staff of the hospital, to weed out the malingerers from the really sick. Those men suffering from slight illnesses were returned to their ships and the doctors were held responsible if the men were kept at the infirmary without

[31] Archives 1761, fol. 283, Royal Malta Library.

[32] Manuscript 173, fol. 85, Royal Malta Library.

[33] Archives 1761, fol. 283, Royal Malta Library.

[34] Archives 161, fol. 103a, Royal Malta Library.

[35] Archives 262, fol. 291, Royal Malta Library. Archives 1759, fol. 339, Royal Malta Library.

[36] Archives 1761, fol. 141, Royal Malta Library.

[37] Rossi, E., *op. cit.*, p. 87.

[38] Manuscript 173, fol. 85, Royal Malta Library.

sufficient reason.[39] The Physician to the Galleys also visited the officers and men lying sick in their homes at Senglea, Birgu and Bormla. Sailors living in Valletta and the villages were seen to by the Protomedicus or Chief Government Medical Officer.[40] Having ascertained that none of the men was simulating illness to avoid going to sea, the physicians drew up sick certificates and forwarded them to the Congregation of the Galleys and caused domiciliary patients to be transferred to the Holy Infirmary.

While at sea the physician attended the sick during the voyage at least twice a day. He first visited the men on his own ship and afterwards, weather and other circumstances permitting, the patients on the other galleys. All cases of illness were reported to the captain. In his rounds the physician was accompanied by a barber-surgeon who carried two registers; in one of them he wrote the patient's name and surname and the date of onset of the illness, and in the other he made notes about the kind of medicines prescribed. Only the physician was authorised to order 'internal' medicines. This applied also to the surgical and venereal patients even though these were under the surgeon's treatment. When the physician was precluded from calling on the other ships, the surgeon of each galley assumed responsibility for the care of all patients on his own ship but he had to submit a report on the patients' state of health and treatment to the physician when the latter was eventually able to board the ship.

Apart from his clinical duties the physician supervised the general management of the sick berth and saw that the patients were provided with suitable diets at the proper time, that the surgeon's medicine chest was in good order, that none of the barber-surgeon's instruments was missing and that the crew's drinking water was wholesome and the food of a good quality.[41] At the request of the General of the Galleys, the physician furnished reports on the health conditions of the squadron. These reports were then submitted to the Sacred Council and read at one of its sittings.[42]

THE SURGEON'S DUTIES

The surgeon, like the physician, made a morning and evening round in the company of his assistants—the barber-surgeon and the clerk—who kept notes of the remedies prescribed. If a patient remained ill for more than twenty-four hours it was the surgeon's duty to counsel him to confess and to receive Holy Communion in accordance with the regulations of the Holy Infirmary.

In the treatment of venereal cases the surgeon had to conform to certain specific instructions. He was forbidden to employ mercurial inunctions on account of the harmful effects of the mercury vapours on the health of non-venereal patients in the ward. Apart from this the Order was very strict against mariners suffering from these infections and showed great reluctance to treat them as a deterrent against indulgence in illicit amours. In fact the surgeon was directed to keep a separate register for the entry of the names of venereal patients treated on board and of the quantities of drugs used in their treatment so as to enable the Government Treasury to charge the patients with the cost of the medicines. Before the eighteenth century the surgeon was expressly prohibited from charging a fee for the treatment of these diseases but in 1776 he became entitled to payment in accordance with a tariff fixed by the Congregation of the Frigates.[43]

---

[39] Archives 1764, fol. 71t, Royal Malta Library.

[40] Manuscript. Statuti della squadra dell'Ordine Gerosolimitano, fol. 72. Property of Dr. J. Darmanin Demajo.

[41] Archives 161, fol. 125t, Royal Malta Library.

[42] Archives 1769, fol. 186, Royal Malta Library.

Every ship was provided with a medicine chest and it was the surgeon's responsibility to ensure that it was adequately stocked with the drugs that might be needed during the voyage and that these pharmaceutical preparations were examined at frequent intervals to prevent their deterioration. On the ship's return to harbour at the end of the cruise the chest was taken to the pharmacy of the Holy Infirmary and, after the unused drugs were delivered to the apothecary, replenished for the next voyage.

It was likewise the surgeon's duty to ascertain that the food was properly cooked; to make sure that the water was fit for drinking and that a small quantity of vinegar was added to the water when this was not of the best quality; that the fruits bought from ports of call were quite ripe; and that the patients' clothes and bed linen were laundered when fresh water was taken on board. He also kept an eye on the clothing issued for the use of the sick to prevent its being worn by the healthy members of the crew while he himself was especially warned not to use the patients' towels for his personal needs.[44] Flax and cotton wool for the dressing of wounds were issued to him in fixed quantities and he had to see that they were not wastefully employed. He was also supplied with two urinals once a year.[45] Surgical casualties were never wanting as it was uncommon for a galley to put out to sea without encountering and engaging in combat some Moslem ship. Although small guns and the arquebus were in use, the most common way in which sea-battles were conducted was by boarding the opponent's ship and engaging him in a hand-to-hand fight on his own deck so that the surgeon had to be prepared to deal with injuries produced by splinters and by a diversity of weapons such as firearms, swords, axes, pikes and arrows.[46]

One of the barber-surgeons was always on duty and ready at a moment's notice to perform blood-letting or shave the beard as circumstances required.[47] He was also charged with seeing that the tumblers, bowls and spoons supplied to the patients were properly washed and cleaned.[48] His quarters were in the soldiers' guardroom.[49]

---

[43] Archives 1764, fol. 26, Royal Malta Library.

[44] *Ibid.*, fol. 74t, Royal Malta Library.

[45] Manuscript. Statuti della squadra dell'Ordine Gerosolimitano, fol. 207. Property of Dr. J. Darmanin Demajo.

[46] Archives 1764, fol. 71t, Royal Malta Library.

Precise directions were laid down as to the place and duties of each member of the ship's company when an engagement with the enemy was imminent. Apart from the chaplain, the medical team constituted the only personnel who had no combatant duties. Their battle station was in the hold where they prepared the beds, the surgical appliances and instruments and waited for the arrival of the casualties.[50] These encounters with the enemy kept the surgeons and their teams busy for many days caring for the wounded of both sides. The fallen foe was nursed with the same solicitude as his Christian victor, for his life, thanks to the institution of slavery, had a great economic value, for the higher the social status of the prisoner the heavier the ransom price set on him in the slave market.

Occasionally the surgeon had to deal with a type of contingency that is totally unknown to the modern ship-surgeon. Mention has already been made of the oarsmen who provided the motive power for the galley. These slaves and convicts were a sullen and desperate set of men who stooped to the most wanton ways to deliver themselves from a life of intolerable sufferings. One of the means to which they resorted was the self-infliction of serious injuries to render themselves useless as rowers. To discourage these attempts very brutal penalties were laid down by the naval regulations of the Order. No disciplinary steps were, however, taken before the self-disabled oarsman was examined by the surgeon on whom devolved the grave responsibility of forecasting the probable consequences of the injury. If the injury was considered likely to lead to impairment of the slave's efficiency as an oarsman, the poor gallerian was whipped and his nose cut off. If he dared to maim himself again he had his ears chopped off; for a third offence he was hanged by the neck.[51] One need hardly say that the surgeon was no party to this butchery. The infliction of these punishments was the duty of a lay official called the taskmaster ('agozzino') who was responsible for the maintenance of discipline among the slaves.

The surgeon kept a record of all persons dying on board and superintended their burial. He ensured that in the case of seamen who were too poor to afford a shroud from their belongings, a piece of canvas or other material was procured for wrapping the corpse before it was committed to the deep.[52]

When a 'contagious' illness appeared on board the surgeon was enjoined to take all the necessary precautions to prevent its extension to the healthy members of the crew, special stress being laid on the disposal of clothes and other personal belongings which in those days were believed to act as fomites. If, in spite of all precautions, some form of pest broke out on a galley, the surgeon ran the very grave risk of falling a victim himself. If he escaped death, he was confined in quarantine with the rest of the survivors on his arrival in Malta. Time spent in quarantine was not always a period of inactivity for the surgeon because he had no assurance that his enforced rest would not be suddenly interrupted by some unexpected request for his services ashore. One such instance occurred in 1660. In May of that year one of the galleys was in quarantine in Marsamxett Harbour following her return from a cruise. Towards the end of the month it happened that Grandmaster Annet de Clermont was lying gravely ill at the Palace at Valletta. An urgent call for the surgeon on board the galley was issued from the Palace by the Council of the Order. The surgeon was ordered to go ashore but as his ship had not yet been given pratique and as, in consequence, no boat was allowed to approach the galley, no means of transport could be provided for the surgeon's transit to Valletta. He was, therefore, ordered to divest himself of all his clothing and to plunge into the sea completely naked and swim across the harbour to the Valletta foreshore.[53] The Council believed that through this measure any foci of 'contagion' that the surgeon might have harboured on his clothes or on his body were eliminated and that after his immersion in sea water and putting on a new set of clothing, he could safely proceed to the Palace and treat his august patient. The Council's instructions were strictly carried out but in spite of the naval surgeon's devotion to duty and expert skill the Grandmaster was dead within two days.

---

[47] Archives 1761, fol. 283, Royal Malta Library.

[48] Archives 1764, fol. 76, Royal Malta Library.

[49] Archives 6392, fol. 31, Royal Malta Library.

[50] Archives 161, fol. 115a, Royal Malta Library.

[51] Manuscript. Statuti della squadra dell'Ordine Gerosolimitano, fol. 70. Property of Dr. J. Darmanin Demajo.

[52] Archives 1761, fol. 283, Royal Malta Library.

STATUS AND SALARIES OF MEDICAL STAFF

The surgical personnel was chosen by a competitive examination on the principle that proficiency was to be preferred to seniority, the latter being taken into consideration only when the candidates were of equal ability.[54] Examination was compulsory not only for entrance to the naval medical service but also for advancement from one grade to another within the service itself. Thus barber-surgeons had to submit to an examination to become assistant-surgeons, the same procedure being followed for promotion from assistant-surgeon to surgeon. The next step in the career of the naval surgeon was transfer from the navy to a post ashore at the Holy Infirmary or at the Women's Hospital or at the Slaves' Prison.[55] These methods of selection contrast very markedly with the procedures for enlisting surgeons in the contemporary British Navy where unskilful

[53] Archives 121, fol. 103t, Royal Malta Library.

[54] Archives 1761, fol. 283, Royal Malta Library.

[55] Archives 1195, fols. 53 and 137t, Royal Malta Library.

professional men were often pressed into the service against their will and where surgeons deserted their ships like ordinary sailors.[56]

The post of Physician to the Galleys was filled without examination; all that was needed was an appointment from the Grandmaster. The naval medical and surgical officers ranked next to the Purveyor who was the highest official in the technical branch. The physician ate at the same table as the Purveyor and like him had his sleeping quarters in the biscuit store.[57] No proper living quarters had been allocated to the physician on ship-board until 1663 when by a decision of the Order's Council he was assigned an office in the poop of the vessel. Among the considerations that induced the Council to take this step was the desire to provide the physician with a suitable place where he could examine his patients in private, 'have a rest from his labours after he had been occupied for many hours at a stretch, retire to read or write at any time of the day or night . . . and keep his chest of books beneath the lantern to enable him to open it at all hours according to his needs'.

The physician remained in undisputed possession of this office until 1785 when an attempt was made to turn him out. This office actually formed part of the biscuit store where the Purveyor and his clerical staff also worked. It appears that in 1785 a quantity of biscuits was missed from the store and it was suspected that the physician's servant was responsible for its disappearance. The physician of that day, a certain Dr. Giuseppe Grech, took up his pen in defence of his servant and of his own privileges. He addressed a memorial to the Grandmaster protesting against the taint cast upon his servant and appealing to His Highness to safeguard the rights of the physician 'in view of the steadfast loyalty with which the medical profession was serving the Sacred Religion and, in the name of all his future successors, to please His Highness to allow the physician to remain in his office inside the biscuit store and to deposit his chest of books beneath the lantern where all his predecessors had kept it'. Dr. Grech's petition received the 'fiat' of the Grandmaster and the Physician to the Galleys continued to enjoy the peaceful tenancy of the biscuit store.[58] It is of interest to note in this connection that the medical officers of other navies were not always adequately provided with accommodation even as late as the mid-nineteenth century. In 1853, for instance, there were at least two assistant surgeons on British ships stationed in Malta who had no cabin while elsewhere an assistant surgeon had been deprived of his cabin 'while the Captain's steward had his berth, his pantry and his store room'.[59]

Until the beginning of the seventeenth century the physician had received a fixed annual salary but in 1603 the Council of the Order decided to abolish his salary and left it to the discretion of the Grandmaster to compensate him for his medical services rendered to the navy. This practice prevailed until 1631 when the Council reverted to its old policy of granting a fixed salary to the physician.[60]

---

[56] Lewis, M., *The Navy of Britain*, London, 1948, p. 187.
[57] Archives 1759, fol. 339, Royal Malta Library.
[58] Archives 1195, fol. 25, Royal Malta Library.
[59] *The Malta Mail*, 13th May 1853, p. 2.

In 1646 the emoluments of the physician were 150 'scudi' a year (£12 10*s*.), an amount that was considered to be too low even in those days and unlikely to attract the best talents in the profession to join the navy. The Council 'realising that the Physician to the Galleys must be learned and experienced' and that with the salary attached to his post it was difficult to find a suitable candidate, resolved on the 23rd February 1646 to raise his salary to 300 'scudi' a year (£25). The Council, however, was reluctant to burden the government with this extra expense and in April of the following year it was decided that the increase should be borne by the officers in the form of a small monthly deduction from their pay. This scheme, however, did not work and by a decree of the 12th August 1648 the entire salary of the physician had to be defrayed by the Treasury.[61] The difficulty of enlisting a proficient physician for the fleet again cropped up some twenty years later when to secure the services of a good doctor the Council gave a free hand to the Treasury authorising it to augment the salary by any amount it considered necessary.[62] Owing to the financial straits of the Order in the succeeding century, the physician's salary was again lowered so that it stood at 250 'scudi' in 1776 (£20 16*s*.). The only redeeming feature was that in spite of its having been reduced, it still remained one of the highest salaries in the technical branches of the navy.[63]

The emoluments of the surgeon varied from 180 to 216 'scudi' a year (£15 to £18) depending on the rank of his ship; the assistant surgeon was paid 96 'scudi' (£8) and the barber-surgeon from 24 to 60 'scudi' (£2 to £5).[64] Rations valued at about 12 'scudi' (£1) a month in the early seventeenth century were given in addition to the salary.[65] A pension was granted on retirement usually after forty years service in the navy. A pension was also given to the widows and orphans of medical men dying in action.[66]

With the occupation of Malta by the French in 1798 the Order's navy fell into the hands of the new masters and was incorporated in their own fleet. When Napoleon sailed from Malta for the expedition against Egypt over one thousand Maltese sailors and soldiers were embarked on the French ships[67] and it is quite probable that the medical personnel that had hitherto served on the Order's ships was, like its mariners, absorbed into the French naval medical service.

---

[60] Archives 1760, fol. 614, Royal Malta Library.

[61] *Statuti della Sacra Religione di S. Giovanni Gerosolimitano*, Borgo Nuovo, 1718, p. 174.

[62] Archives 1759, fol. 338, Royal Malta Library.

[63] Archives 1764, fol. 91t, Royal Malta Library.

[64] Archives 1760, fol. 614, Royal Malta Library. Archives 1764, fols. 91–94, Royal Malta Library.

[65] *Ordinationi del Capitolo Generale MDCII*, Rome, 1609, p. 247.

[66] Archives 161, fol. 103, Royal Malta Library.

[67] Rossi, E., *op. cit.*, p. 94.

CHAPTER 14

Surgery at the Holy Infirmary

OUR knowledge of the surgical work performed in Malta during the time of the Order of St. John is practically limited to traumatic surgery as practised at the Holy Infirmary in the eighteenth century. The bias in favour of wound-surgery at this period is understandable if we bear in mind that the Order of St. John was constantly engaged in naval warfare against the Moslems and that the Holy Infirmary was the only hospital in Malta for the reception and treatment of wounded knights, sailors, soldiers, civilians and slaves.

In assessing the nature and value of this work one must consider that European surgery had not yet freed itself completely from Hippocratic and medieval ideas. Progress had been achieved in anatomical knowledge but physiology and pathology were still in their infancy. Nothing was known about the origin and prevention of sepsis, while in making a diagnosis and in planning treatment the surgeon had nothing to help him except his own powers of clinical observation, his acumen and the lessons he had learned from past experience. Anaesthesia had not yet been dreamt of and operations were painful and frightening. Speed in carrying out the operation was, therefore, an extremely important factor and the surgeon's ability was measured by the time he took to operate. Surgeon Michel'Angelo Grima, for instance, was renowned for his rapidity in performing lithotomy and mastectomy which he did in two-and-a-half and in three minutes respectively.[1] Surgeon Gabriele Henin dissected and removed a 'sarcoma' weighing five pounds from the back of a patient in two minutes.[2] Probably, as was the practice on the continent, the patient was laid on a wooden table with a leather-covered top. His hands, feet and trunk were bound and tied to the table to prevent him from moving and interfering with the surgeon's manipulations. A sleeping draught containing opium may, however, have been administered some time before the operation which was at times performed in the presence of distinguished lay spectators such as the Head of the Infirmary and other dignitaries of the Order of St. John.

It is on record that surgical instruments had been acquired in 1716 but by the mid-century 'no trace of them had remained'. It may be presumed that not much surgical work was carried out during this intervening period. To make good the deficiency a 'considerable quantity' of new instruments was bought from Paris in 1761. They had been manufactured by the 'most renowned and expert craftsmen' of the French capital and to prevent their disappearance from the infirmary the Veneranda Camera del Tesoro issued a decree in which were laid down detailed instructions as to their care and maintenance. The instruments were entrusted to the Prud'hommes who drew up an inventory and were held responsible for their loss or damage. When not in use they were stored under lock and key in a cabinet reserved specially for this purpose and placed in the office of the Prud'hommes who kept the keys in their possession. The instruments were examined and cleaned at least once a month under the personal supervision of one of the infirmary surgeons to prevent them from being spoiled by rust. Those that were broken during operations in the infirmary were repaired or replaced at government expense; but when they were damaged during use outside the hospital in private operations, their loss or damage had to be made good by the surgeon in charge of the case.[3]

---

[1] Manuscript 1146, vol. ii, pp. 202 and 292, Royal Malta Library.

[2] Henin, G., *Observatio chirurgo-anathomica*, Messina, 1749.

THE LOCAL TREATMENT OF WOUNDS

Firearm wounds were particularly common. There were two schools of thought with regard to their treatment. One school held that gunpowder and musket balls were toxic substances and that they produced lethal effects on the body by virtue of their inherent poisonous properties; the other school maintained that bullets could not be toxic in themselves because any poison they might have originally possessed was lost through the heat generated by the discharge of the weapon and by the friction with the air particles during their transit through the atmosphere. In dealing with firearm wounds the adherents of the former school aimed at neutralising the poison in the injured part by cauterising it with a red-hot poker or by pouring boiling oil in the wound; the followers of the other school of thought refrained from the use of such crude measures and limited themselves to the extraction of the foreign body and dressing the wound. How long cauterisation and boiling oil remained in use at the Holy Infirmary is not known but it is certain that they had fallen into disrepute by the eighteenth century when they were condemned as a 'barbarous and cruel practice'.[4] In fact more rational methods were being applied at this period. After exploring the lesion with the finger or with a speculum and removing all extraneous matter the wound was washed with a solution of water and alcohol. This method had replaced the practice current in the seventeenth century of cleaning wounds and ulcers with wine of which great quantities were consumed at the infirmary.[5] The wound was then packed with threads for the absorption of blood and serum, care being taken not to use an excessive number of strands to avoid tension and compression on the healthy tissues. The wound was covered with a small piece of linen cloth and a bandage applied to keep the dressing in position. Special attention was paid to the proper bandaging of wounds as it was realised that a badly applied bandage could retard the healing process and, in certain respects, even cause the loss of a limb through interference with its blood supply. The surgeon, therefore, made it a point to ascertain that the bandaging was not unduly tight thus making allowance for the swelling of the tissues by inflammation and suppuration. When, in spite of this precaution, the part became very swollen the bandage was removed and re-applied and kept moist by an aqueous solution of common salt and a mixture of vinegar and water.[6]

---

[3] Archives 634, fol. 47, Royal Malta Library.

[4] Grima, M. A., *Della medicina traumatica*, Firenze, 1773, p. 39.

[5] Archives 114, fol. 126, Royal Malta Library. Manuscript 279, vol. ii, fol. 825, Royal Malta Library.

Suppuration was expected to occur in every wound. It was not only considered to be inevitable but was regarded as a desirable and essential phase of the healing process, and a 'digestive' preparation consisting of a mixture of turpentine, myrrh tincture and yellow of egg was applied to the wound to promote pus formation. This procedure was followed also in the case of clean-cut wounds until the last quarter of the eighteenth century when closure by suturing replaced the older methods thanks to the wise counsels of the surgeon Michel'Angelo Grima, who had the opportunity of observing the advantages of suturing while working at Cassel Hospital in Germany.[7] He placed hardly any reliance on the use of medicaments; indeed he declared that it was not the medicaments introduced into the wound that cured it but the '*vis medicatrix naturae*' adducing as proof 'the example of animals who by licking their sores get well without the aid of our profession'.[8] However, he was not averse to the use of powdered juniper in caries and chronic ulcers.[9] Collections of pus were opened up and evacuated, emphasis being laid on a sufficiently bold incision to obviate the necessity later on of a more extensive one to secure a free flow of pus. Suppurating wounds were repeatedly washed with irrigations of tepid water or a decoction of quinine in preference to wiping them clean with tow or similar material which caused unnecessary pain to the patient and destroyed the granulation tissue. Although the surgeon had as yet no inkling of the existence of bacteria and of the origin of sepsis, the idea that exposure of the wound to the air was harmful had already gained ground and for this reason care was taken to keep the wound covered with a warm piece of linen cloth held in the left hand during the cleansing and changing of the dressing. Formation of excessive granulation tissue was kept in check by the use of caustics such as silver nitrate.[10]

---

[6] Grima, M. A., *op. cit.*, p. 35.

[7] *Ibid.*, pp. 215 and 228.

[8] *Ibid.*, p. 52.

[9] *Storia della Società Medica d'Incoraggiamento*, Malta, 1845, p. 109.

[10] Grima, M. A., *op. cit.*, pp. 50 and 59.

GENERAL TREATMENT OF THE WOUNDED

The damaging effects of exposure to cold and of long journeys in jolting carriages, especially in the case of head injuries, had been observed by Michel'Angelo Grima during his work as a military surgeon in Germany in 1761–62 during the Seven Years War. He applied this lesson to civilian practice on his return to Malta in 1763 when he stressed the importance of preventing movements of the injured parts of the body during the patient's transportation to hospital. When, after treating a casualty, it was necessary to remove the wounded man from hospital surgical students were provided to attend him during transit to ensure that if the bandaging became displaced by the stretcher-bearers or by the movements of the carriage, it was removed and re-applied '*secundum artem*'.[11]

When a patient lost consciousness he was revived with strong vinegar and ammonia vapour and his face was sprinkled with cold water. After coming round a cardiotonic was administered in the form of small doses of 'old, strong wine' such as Alicante and Malaga. He was then encouraged to void his stomach and bowels by means of tartar emetic and almond oil.

Blood letting in small but repeated amounts was a routine procedure. It was performed with the intention of preventing an unduly violent inflammation of the wound and of promoting the absorption of blood extravasated into the tissues. The jugular and brachial veins were those most often opened but veins in the leg were also used. The actual quantity of blood removed depended upon the 'constitution' and 'temperament' of the patient. Phlebotomy in liberal amounts was recommended for the 'sanguine' type of individual but less copious blood-letting was performed in persons of a 'bilious' habitus; while it was contra-indicated in those of a 'melancholic' disposition.

The fever accompanying suppuration was controlled by quinine which was administered as an 'antiseptic' in camomile water; excellent and even 'miraculous' effects were claimed for this drug.[12]

As to diet the patient had chicken broth in the first few days of treatment but when the suppurative process was established he was given more nutritious food such as meat broth containing rice, one or two yolks of egg and a spoonful of Alicante wine. Once the cicatrisation of the wound had set in a return to normal food was made.

Subjects suffering from syphilis and scurvy received specific treatment, as then understood, for these diseases as it was known that they retarded the healing of wounds.[13]

The most common complications and sequelae of wounds were erysipelas, metastatic abscesses, fistulae and sinuses, gangrene and exhaustion from prolonged suppuration. It appears that tetanus was also seen though it was not recognised as such. In fact one comes across references to the 'tension of the nervous system' that was observed as a consequence of certain types of lesions. Surgeon Grima insisted on the 'adoption of the most efficacious means to calm the tonic convulsions of the nervous system' as otherwise the patient ran the risk of dying from a wound 'of a seemingly slight nature'.[14] These convulsions were ascribed to irritation of injured peripheral nerves and to 'drying of the wound'. The measures recommended for the control of the convulsions consisted in the removal of irritant stimuli, such as fragments of bone, and in procuring the 'free circulation of fluids in all the small vessels of the body' and, finally, in ensuring an unhampered flow of discharges from the wound.

---

[11] Grima, M. A., *op. cit.*, pp. 38 and 196.

[12] *Ibid.*, p. 45.

[13] *Ibid.*, p. 61.

It was known that purulent matter from wounds could reach other parts of the body by means of the bloodstream and then lodge in the lungs giving rise to empyaema, and in the liver and brain with the formation of local abscesses in these organs. Such cases were invariably fatal. Insomnia was often noted to precede the manifestations of these metastatic abscesses and sleeplessness was therefore regarded with apprehension by the surgeon who took prompt measures to induce sleep through blood-letting, purging, vomiting and the administration of narcotics.

To prevent the formation of fistulae, wounds suspected of containing foreign bodies that could not be extracted at operation were drained by means of strands, sutures or other similar material inserted in the wound. When, in spite of this precaution, a fistula developed the closed passage was opened up and the granulating tissue scraped away to form a fresh surface.

TREATMENT OF HAEMORRHAGE

Bleeding was controlled by compression and by ligature. The dangers of compression, derived from obstruction of the blood supply by an unduly tight bandage, and of reactionary haemorrhage, from insufficiently strong coagula, were always kept in mind and every precaution was taken to avert them. Little reliance was placed in styptic medicaments as it was known that they were ineffective without adequate compression. Compression was carried out by exposing the bleeding vessel, if necessary by enlarging the wound, and then applying over its lumen a small ball of threads, the ball being kept in position by packing the wound and tying a firm bandage over all. In an emergency manual compression or a tourniquet was used. Sometimes phlebotomy was resorted to in the hope that by lowering the blood pressure a clot would form and clog the patent artery or vein.

Whenever feasible the method of choice was ligature of the vessel by a thread. The bleeding vessel was identified and a needle provided with a well waxed thread passed round it so as to form a noose; a knot was then tied over a small wad of cotton to avoid causing pain and discomfort to the patient. Ligature of the carotid artery and of the jugular vein was not attempted lest interference with the blood supply to the brain caused the death of the patient. Instead, a pad was placed over the ruptured vessel and the skin over it was sutured to retain it in position.[15]

---

[14] Grima, M. A., *op. cit.*, p. 62.

The following case history recorded by the surgeon Michel'Angelo Grima conveys a good idea of the measures adopted to arrest serious bleeding. In 1766 a coachman was admitted to the Holy Infirmary suffering from an incised wound of the left side of the neck with tearing of the external carotid artery. The haemorrhage from this vessel was stayed by the surgeon on duty but it kept recurring until through loss of blood the patient's condition deteriorated to such an extent that the last Sacraments were administered. Other attempts were made to control the bleeding by the application of agaric but to no avail and the wounded man became almost pulseless. At this stage, wrote M. A. Grima, 'I was called as senior surgeon by the Infirmarian of the hospital to see the patient and treat him. I took away the bandages, removed the agaric, cleaned and enlarged the wound and exposed the ruptured artery. I put a ball of strings over the aperture of the vessel, packed the wound with dry threads and then applied the usual bandages without exerting undue pressure. The bleeding ceased and the patient's condition began to improve gradually. Suppuration was established by the third day and I continued to dress the wound by replacing the soiled threads with dry ones. In the meanwhile an abscess formed over the spinous process of the scapula which I opened and drained of its pus. The neck wound began to granulate, the ball of thread was slowly extruded and in less than fifteen days the wound healed by scarring. I then continued to medicate the abscess. Within the space of a month-and-a-half the patient was quite well and he left hospital hale and hearty and continued to work as a coachman.'[16]

HEAD INJURIES

Simple contusions of the scalp were allowed to heal spontaneously unless they were produced by firearms when they were incised and drained of the extravasated blood. The underlying bone was then explored to see if it had been fractured. This line of treatment was also pursued in cases of severe contusions caused by falls or blows on the head and accompanied by disturbances of consciousness as it was claimed that incision and drainage resulted in a subsidence of the cerebral symptoms. Here are the notes of two such cases treated by this method at the infirmary. A boy aged ten years was injured in the left parietal region. A few days later he was seized by delirium and severe pains in the head. It was decided to trephine the skull but on second thoughts this operation was postponed on account of his unsatisfactory general condition. Instead, the site of injury was incised and a few hours later the pain and delirium disappeared and the patient was eventually discharged cured. The other instance concerns a man who fell from a runaway horse and sustained an extensive contusion of the occipital region. On being conveyed to hospital he was bled and had local applications of water and vinegar but within a few hours he became delirious and later somnolent. The contused scalp was incised and the bone explored but no osseous lesion was found. In the evening the general state of the patient started to improve and he was able to remain awake and eventually to regain full consciousness. Recovery was rapid and he left hospital quite recovered.[17]

---

[15] Grima, M. A., *op. cit.*, p. 109.

[16] *Ibid.*, p. 34.

The pathology of the 'contrecoup' phenomenon of head injuries was well known. Indeed Grima submitted a dissertation on this subject, under the title of 'De cranii repercussione', to the Royal Medico-Chirurgical Academy of Paris for which he was awarded a gold medal in 1756.[18] In depressed fractures of the cranium a distinction was made between those cases in which only the outer table of bone was broken without involvement of the inner table, and those instances in which both tables were fractured and the fragments pushed inwards to compress the dura and the brain. These cases were dealt with by operation. The depressed piece of bone was raised by means of an elevator but if no opening was available for the introduction of this instrument an aperture was made by the trephine into the bone near the lesion for this purpose. Removal of loose bits of bone or of foreign bodies such as pieces of metal penetrating the brain substance, was attempted only if these were embedded in the superficial layers of the brain.

Surgeons were fully alive to the possibility of detachment of the dura mater by an apparently slight violence to the skull that gave rise to a slowly developing meningeal haemorrhage which tracked down to the base of the skull and produced compression of the brain, but they were not always able to save their patients thus affected. Such was the case of a man who was admitted to hospital on the 30th January 1770 with an open wound of the scalp produced by a blunt instrument and involving the upper part of the right parietal bone. The wound was dressed and the patient bled. He seemed to be doing well until the fourteenth day when following the appearance of acute symptoms he died within a short time before trepanning could be performed. Necropsy revealed a collection of about three ounces of blood lying between the dura and the left parietal bone, that is on the side opposite to the site of the wound, so that even if the trepanning of the right parietal bone had been carried out the dura on this side would have appeared intact and no blood clot would have presented at the trephine opening. 'This is the type of lesion', commented the surgeon who recorded this case, 'that has at all times deceived not only obscure and mediocre practitioners but also the most learned and expert members of the profession who enjoy the highest reputation in the world.'[19]

[17] Grima, M. A., *op. cit.*, p. 85.

[18] *Ibid.*, pp. 92 and 179–216.

[19] *Ibid.*, p. 88.

FRACTURES

The principles underlying the treatment of fractures of the limbs were well understood and applied. Following reduction, the broken bones were maintained in proper alignment by means of splints made of tin, cardboard or folded linen cloth dipped in water and vinegar. When the fracture was complicated by injuries to the soft tissues a 'window' was cut in the splint to facilitate inspection and medication of the wound; in this way the risks of displacing the bone fragments when renewing the dressings were avoided. In the case of a comminuted fracture that could not be adequately reduced and fixed, the loose fragments were removed to permit the approximation of the ends of the larger pieces of bone. Amputation was resorted to when the bones were severely crushed.[20]

Purulent conditions of the eyeball occurred as complications of fractures of the orbit produced by fire-arms. The first line of treatment consisted in the application of leeches to the temple on the injured side in an attempt to prevent or reduce the inflammatory reaction in the eyeball. When, in spite of this form of therapy, the amount of pus continued to increase the eyeball was opened up by a cruciform incision and the purulent matter evacuated. This heroic measure was undertaken because surgeons were familiar with the condition of 'sympathetic panophthalmitis' and were fully aware that unless inflammation in the injured eye was checked and controlled, it could excite a similar reaction in the opposite healthy eye with the risk of losing vision in both eyes. The spread of the inflammatory process from the exciting to the other eye was believed to take place along the optic nerves and the chiasma—a theory that has survived well into the present century. In the non-traumatic field, removal of cataracts was the most frequent operation carried out on the eyes.[21]

In fire-arms fractures of the mandible no effort was spared to remove the shot, fragments of bone and other foreign bodies from the wound, the main concern being the prevention of the formation of a fistula. If, even after these precautions, a fistula resulted, a determined attempt was made to obliterate it and procure the closure of the wound. In simple fractures of the mandible the fragments were reduced and kept in apposition by means of interdental splinting effected by tying the teeth together until healing occurred.

Whether attempts at plastic surgery of the face were made at this period is not clear but the importance of preventing deformities in the treatment of wounds was fully appreciated by the Holy Infirmary surgeons who were quite familiar with the 'De curtorum chirurgia per insitionem' of Gaspare Tagliacozzi, the sixteenth-century plastic surgeon of Bologna.[22]

---

[20] Grima, M. A., *op. cit.*, p. 57.

[21] Manuscript 14, fol. 206, Royal Malta Library.

[22] Grima, M. A., *op. cit.*, p. 58.

SPECIAL OPERATIVE TECHNIQUES

The technique of trephining of the skull was well developed. When undertaking this operation the surgeon ascertained, first of all, that all the instruments needed for the procedure were in good working order and laid out on a small table near him to be at hand as soon as required. A duplicate set of instruments was also made available so that if anything went wrong with an instrument during use it could be replaced without loss of time. The surgeon then put the patient in such a position as would permit him to operate as quickly and as comfortably as possible and distributed his assistants in their proper places. The site of operation was then chosen, care being taken to avoid the sutures and the sinuses. After raising a flap of the scalp the trephine was applied to the bone with the centre-pin projecting beyond the crown. The instrument was turned gently until a well defined groove was cut in the bone when the centre-pin was removed to prevent it from puncturing the meninges and brain. After cutting away the disc of bone the margins of the trephine opening were smoothed by the forceps and by a lenticular knife so that the membranes would not get torn by rubbing against the sharp rim or some spicule of bone. Closure of the opening was effected by laying over the exposed membrane a circular piece of red silk somewhat larger than the circumference of the aperture, the idea being to cover the membranes and thus protect them from the injurious effects of exposure to the air and from the edges of the bone opening. A thread was attached to the centre of the silk disc to facilitate its removal. The bone hiatus was then packed with small pads to prevent herniation of the brain and the scalp flap replaced. A piece of linen was then laid over the wound and the head bandaged. No local medication was applied and the dressing was disturbed as little as possible as it had been observed that the simpler the dressing and the fewer the changes of bandages the less was the suffering of the patient and the quicker the closure of the wound.

Trephining was carried out for the elevation of bone fragments in depressed fractures of the skull, for draining collections of blood between the dura and the vault, for the removal of pus from the brain substance and for internal hydrocephalus in those cases where closure of the sutures and fontanelles had occurred. The operation was also considered to be of value in epilepsy, vertigo, melancholia and severe headaches. It is recorded that trephining was performed with success by several surgeons on the infirmary staff. Indeed it was attended by such beneficial effects that one of these surgeons did not hesitate to carry it out on his own son who was himself a surgical student. The result in this case was described as 'admirable' and recovery perfect.[23]

---

[23] Grima, M. A. *op. cit.*, pp. 93–97.

AMPUTATION AND DISARTICULATION

The appearance of gangrene struck dismay both in the patient and in the surgeon for before the mid-eighteenth century hardly one per cent of patients with this complaint managed to survive.[24] A distinction was drawn between the dry and the moist variety. The latter was not surgically interfered with but was left to be cast off from the healthy tissues through the natural reparative processes of the body. Dry gangrene, on the other hand, was treated by a scarification, the main aim being to permit 'the entry of air' among the drying tissues and provoke a suppurative process which would bring about the separation of the dead tissue from the body. Stasis in the gangrenous limb was combated by the application of hot fomentations with the object of promoting the dilatation of the blood vessels and thus assisting the circulation. When these conservative measures failed to stop the degenerative process amputation was carried out.

The removal of a limb, like trephining of the skull, was considered to be a 'supreme operation'. Amputation was, in fact, resorted to as an extreme step when all other measures had proved inadequate to save a diseased limb and when the life of the patient was endangered. The maxim enunciated by Grima was 'to preserve the limb together with the patient's life' but when this ideal could not be achieved the limb was to be sacrificed to preserve the life of the individual. Another guiding principle was not to delay the operation unduly once amputation appeared to be the only course. It was also to be carried out before the patient's health had been undermined by pain, suppuration and advanced sloughing of tissues.

Amputation was undertaken in the following instances: (a) caries of long bones except in the case of children where experience had shown that these patients got well when treated on conservative lines, (b) extensive destruction of tissues by trauma, (c) gangrene, (d) traumatic osteomyelitis which did not improve after trepanning of the bone,[25] (e) aneurysms of the popliteal artery.[26] In amputating special attention was paid to the following points: (a) the posture of the patient, who was placed in the most comfortable and convenient position, (b) the selection of a team of experienced assistants, (c) the proper application of the tourniquet, (d) the provision of a sufficiently large flap of skin to suture over the operation wound, (e) the ligature of bleeding vessels, (f) the smooth trimming of the sawn end of the bone so that no spicules remained, (g) the protection of the wound with a dressing soaked in sea water or saline solution.[27]

When feasible, disarticulation of a limb was attempted although not without some trepidation on the surgeon's part. The indications for this operation were caries of the head of a long bone and the presence of a comminuted fracture. Disarticulation of the shoulder in involvement of the upper part of the humerus was tackled without much hesitation but removal of the head of the femur was not attempted as this operation was attended by a very high mortality on the continent.[28]

---

[24] Grima, M. A., *op. cit.*, p. 73.

[25] *Ibid.*, pp. 67 and 152.

[26] Grima, M. A., *De poplitis aneurismata dissertatio*, London, 1773, p. 16.

[27] Grima, M. A., *Della medicina traumatica*, Firenze, 1773, p. 165.

CHEST AND ABDOMINAL SURGERY

Fractures of the ribs were treated by strapping of the thorax. When the fracture was complicated by haemorrhage into the pleural cavity from an intercostal vessel the ruptured artery or vein was sought and ligatured. In penetrating lesions of the chest care was taken to prevent the entry of air into the thoracic cavity during the dressing of the wound to avert the formation of a pneumothorax as it was known that such a condition could cause the death of the patient through asphyxia from compression of the lungs. In depressed fractures of the sternum the osseous fragment was elevated through a trephine opening made in the bone. Operations were also undertaken for draining an empyema, a haemothorax and collections of pus in the mediastinum.[29]

Foreign bodies penetrating the abdominal viscera were not extracted as 'these parts were not accessible' to the eighteenth century surgeon. Exception, however, was made of the liver if the bullet had become lodged in its convex surface beneath the diaphragm in which case the foreign body was removed through an enlargement of the original wound. Musket balls impacted in the kidneys were also extracted, the method of approach being the same as that followed for the removal of renal calculi.

The treatment advocated for contusions and lacerations of the intestines was that of 'enterrhoraphy' which Grima had propounded in a dissertation published in Paris in 1760.[30] This operation consisted of cutting away the injured loops of intestines and reuniting the healthy portions in an end to end anastomosis by means of a spiral suture. Grima had successfully experimented with this type of suture on living dogs in May 1754 while he was pursuing his surgical studies in Florence. At this period he also carried out animal experiments to show that removal of the spleen did not produce death and that such an operation was also feasible in human beings when this organ became the seat of disease or injury.[31]

The clinical picture, course and treatment of what appears to have been a case of Meckel's diverticulum complicated with 'ascaris lumbricoides' infestation has been recorded and published in 1762. A boy of eleven years was admitted to the Holy Infirmary suffering from an ulcer in the vicinity of the navel. On examination the opening was found to correspond to a similar ulcer in the small intestine in the lumen of which

[28] Grima, M. A., *Della medicina traumatica*, Firenze, 1773, p. 133.

[29] *Ibid.*, p. 113.

[30] Grima, M. A., *Del nuovo e sicuro metodo di cucire gl'intestina*, Parigi, 1760.

[31] Grima, M. A., 'Delle osservazioni fatte sopra il corpo vivente d'alcuni animali intorno le ferite penetranti la gran cavità dell'addome', *Novelle Letterarie*, Numero 29, Firenze, 19 luglio 1754.

could be seen a copious mass of earthworms. The patient was extremely emaciated and running a temperature. Following a consultation of the medical and surgical staffs it was decided to submit him to operative treatment after a course of anthelmintics. The intestinal ulcer was sutured but the external one was left patent. Unfortunately soon after the operation the boy was given to eat a quantity of small cakes by his mother. An enormous distension of the intestines followed, with tearing of the sutures and extravasation of the intestinal contents in the lower abdomen and a fatal issue on the fifth day.[32]

Traumatic lacerations of the urinary bladder were treated by draining the viscus through the introduction and retention of a flexible catheter. In this way leakage of urine into the surrounding cellular tissue with its attendant hazards to the life of the patient was avoided.

Lithotomy was a common operation, the bladder being opened up through an incision in the perineum.[33] Other operations were carried out for the eradication of fistula-in-ano, for the extraction of foreign bodies from the rectum, for the evacuation of the bladder in retention of urine by the infrapubic approach,[34] for the removal of new growths from the male genitals, female breasts and other external parts of the body.[35] Extraction of an impacted foetus from the uterus by division of the baby's body was also successfully attempted.[36]

---

[32] Azzopardi, G., and Bruno, G., *Lettera apologetica contro la dissertazione intitolata nuovo e sicuro metodo di cucire l'intestini*, Messina, 1762, pp. 12–22.

[33] Grima, G. A., *Del nuovo e sicuro metodo di cucire gl'intestina*, Parigi, 1760, p. 30.

[34] Manuscript 14, fol. 206, Royal Malta Library.

[35] Henin, G., *op. cit.*

[36] Manuscript 1146, vol. ii, fol. 236, Royal Malta Library.

CHAPTER 15

Animal Magnetism

PSYCHIATRIC practice in Malta reflected the ideas current on the continent. The material published on this subject by Maltese physicians is very scanty; in fact only two short works are known to exist, both of them belonging to the eighteenth century. Dr. George Imbert, who in later years became the Protomedicus of the Island, is the author of a Latin thesis on melancholia. It was published in Montpellier in 1723 and is dedicated to Grandmaster Fra Antonio Manoel de Vilhena.[1] In this work he describes the physical and mental manifestations of depression and discusses its diagnosis, outcome and treatment. He comes to the conclusion that the administration of medicines is of no avail in this disorder and that only those means capable of promoting 'the flux and reflux' of the vital spirits in the brain are of value. Among the measures he recommends to attain this end are physical exercise, participation in public festivals and jovial conversations with friends and listening to vocal and instrumental music.

The other publication is by Dr. Salvatore Bernard (1724–1806). It is written in Italian and dedicated to Grandmaster Fra Manoel Pinto. It was published in Catania in 1749 under the title of *Trattato filosofico medico dell'uomo e sue principali operazioni*. Dr. Bernard also wrote a paper on the causation of mental disorder ('Sull'origine della pazzia') which was never published and which has not yet been traced. According to Dr. Bernard the 'animal spirits' were conveyed from the brain to the various sensory organs of the body for the mediation of sensation by means of the nerves which were believed to be hollow tubes. Acute mental disorder was thought to be due to a commotion of the 'animal spirits'; chronic psychiatric illness was attributed to an excessive dilatation of the nerve tubes. Dr. Bernard's neurophysiology was disproved a long time ago but his ideas about the power of suggestion on human beings still remain sound to-day. To suggestion he attributes the unexpected cures from certain diseases which have resisted all kinds of treatment. Suggestion, however, can also have the opposite effect; for this reason he warns charlatans of the psychological harm they may do to a patient when, to enhance their reputation as healers, they exaggerate the gravity of his illness and give him to understand that he is at the clutches of death when actually the illness is of little import.[2]

---

[1] Imbert, G., *Quaestio medica eaque therapeutica an aegrotantes imaginarii sola diversitate idearum rejecto omni remediorum apparatu sanandi sint*, Monspelii, 1723.

The theory of animal magnetism, though first promulgated in the sixteenth century, did not become widely known until the latter half of the eighteenth century. In 1766 the Austrian physician F. A. Mesmer caused a great stir in medical circles by his thesis that the planets influenced the human body through an invisible and impalpable fluid. He held that this fluid possessed attractive properties similar to those of a magnet and he maintained that disease was the result of an imperfect balance of the fluid. He further claimed that a knowledge of his theory enabled the physician to cure nervous and other disorders and to modify the action of medicaments in such a way as to redress the balance of the fluid in the patient's body and thus cure him of his illness. In 1778 Mesmer set up a clinic in Paris where he became a very successful practitioner. He treated his patients *en masse* in a dark room in which he kept a tub containing water and iron filings and having jointed iron rods projecting from its lid. The patients applied these rods to their diseased bodily parts while Mesmer, dressed in a lilac gown, waved his magnetic wand over them to the strains of piano music.

By 1783 the vogue for mesmerism had reached Malta and a commission was appointed by the Grandmaster to report upon the efficacy of the new remedy. The report exists in manuscript form.[3] It is written in French over the signatures of the six medical members of the commission. A covering letter in Italian is addressed to His Eminent Highness the Grandmaster and bears the signatures of the three knights who also formed part of the commission. To this letter were attached a number of testimonials submitted by sick persons who claimed to have benefited from mesmerism but none of them can now be traced.

In those days the cultural and social atmosphere of Malta was decidedly French. Ever since the accession of Grandmaster Emmanuel de Rohan (1775), the French Langue became the most influential in the internal and external affairs of the Order of St. John. In medical matters this French bias was also felt for though Malta had its own medical school the French knights encouraged Maltese students to pursue their medical studies in France, so that not a few Maltese young men proceeded to the University of Montpellier to obtain their medical qualifications.[4] Thanks to this bond of cultural kinship between the two countries medical events in France were watched with keen interest by the profession in Malta.

The Maltese scene at this time presented a fertile field for the implantation of theories and practices savouring of the mysterious and the magical, for curiosity in occult matters had been kindled by the flourishing of freemasonry among the knights with its secret rites, by the magic healings of the enigmatic Count Alexander Cagliostro and by the deep interest evinced in the practice of alchemy. At least two of the later Grandmasters, in spite of their cares of state and of their religious vows, fell under the fascination of the various movements then in vogue. In fact Grandmaster Emmanuel Pinto squandered large sums of money on his search for the philosopher's stone[5] while his successor Grandmaster Emmanuel de Rohan is said to have become a freemason though he did not make a profession of it.[6] In such an atmosphere charged with occultism it is not surprising that the craze for animal magnetism found its supporters in Malta and that the Grandmaster should figure among them. It has been alleged that he welcomed the new remedy enthusiastically and that the knights took to treating the sick with the methods of magnetism.[7]

---

[2] Cassar, P., 'The Neuro-psychiatric Concepts of Dr. S. Bernard', *Scientia*, 1949, xv. 20.

[3] Archives 6407, no pagination, Royal Malta Library.

[4] Pullicino, P., *Breve notizia della vita del Dr. Arcangelo Pullicino*, Malta, no date, p. 11.

The first applications of the new remedy were carried out in the mansion of a French knight, the Bailiff Fra Jacques Philippe Gabriel de Barres, who later became Grand Hospitaller and Grand Treasurer of the Order. The patients were treated by a French physician whose name is variously given as Monsieur D'Amic or Amy, a 'pupil of Mesmer to whom the latter confided the method of animal magnetism'.[8] Immediately on his arrival in Malta a considerable number of sick persons sought his aid. In the words of one of his critics many persons were attracted towards him by an 'incomprehensible fanaticism'.[9] Whether D'Amic made use of the magic tub popularised by his master is a matter for speculation; in fact he does not seem to have divulged the nature of his methods which are referred to by the commission as being secret ones. D'Amic, however, did not disdain making use of such orthodox therapeutic means as baths and purgation.

What induced the Grandmaster to appoint the commission is not stated. The terms of reference were 'to report on the value and efficacy of the method of Dr. Mesmer known as animal magnetism'. The commission was made up of three laymen, all of whom being high dignitaries of the Order i.e. Bailiff Fra Nicola Frisari, Bailiff Fra René Jacob de Tigne (lieutenant of the Grand Hospitaller) and Bailiff Fra Mariano de Cascaxares; and of six medical men i.e. Dr. Lorenzo Theij (the Physician-in-Chief of the Order), Dr. A. Cren, Dr. G. Agius (Physician to the Galleys), Dr. G. Grech and the surgeons M. A. Grima and Michele Grillet. They started their work on the 18th October 1783 and submitted their report to the Grandmaster on the 19th December of the same year.

The report consists of three parts: a short note on the method of investigation adopted by the commission, a list of the various types of illnesses treated and the commissioners' comment and opinion. The patients were examined before they underwent the new treatment. Twenty-five cases were selected and a record was made of the onset, course and clinical state of each patient. D'Amic's predictions as to the outcome of treatment were also recorded. These notes were made in order to enable the commissioners to determine the advantages and results of the treatment. To exclude the possibility of any fraudulent falsification of the notes taken, the records were signed by the Protomedicus on behalf of the members of the commission and by Monsieur D'Amic. Having established these measures of control, D'Amic was allowed to treat the patients according to his own ideas. At the end of almost two months the commission again visited De Barres' residence to re-examine the twenty-five cases and judge the effects of treatment. The patients were of both sexes and their ages ranged from six to sixty-seven years. Almost all the social strata of the population were represented, there being among the sick, besides humble folk, an abbé, four knights and a baron.

---

[5] Doublet, P., *Mémoires historiques sur l'invasion et l'occupation de Malte*, Paris, 1883, p. 5.

[6] Broadley, A. M., *The History of Freemasonry in the District of Malta*, London, 1880, p. 5.

[7] Janet, P., *Psychological Healing*, London, 1925, p. 32.

[8] Vinazzo, D. C., *Lettera responsiva*, Catania, 1784, p. 21.

[9] *Ibid.*, pp. 24–25.

The illnesses consisted of eye diseases, rheumatic affections, 'stoppages and obstructions' and other maladies of different kinds. To give an idea of the type of case included in these categories, an illustrative example from each class is here reproduced in its English translation:

(a) *Eye diseases.* 'R. C., aged six years and of a sanguine temperament, suffered from an inflammation of the right cornea following a malignant fever three years previously. The cornea was opaque, hard and protuberant. Hopes of a cure were entertained but no promises were made by Monsieur D'Amic.' When they saw her at the end of treatment the commissioners wrote: 'We have noted that the eyeball has diminished in size. The girl's mother told us that the patient could see sideways. To verify this statement the healthy eye was covered and the girl was asked to find Monsieur D'Amic after he had called her by name. We then told her to identify the Protomedicus, who happens to be her family doctor, but without his calling her. She was unable to do so. We showed her various objects such as handkerchiefs, scissors etc., but she could not recognise any of them.'

(b) *Rheumatic diseases.* 'C. C., aged twenty-seven years, of a bilious temperament, married. She suffers from rheumatism in both arms. For four months the articulations and the back of the left hand have been swollen. There is loss of movement in this hand and atrophy of the arm. The wrist is powerless, the movements of the fingers imperfect and the shape of the hand altered. She was told that she would be cured apart from the deformity of her hand.' On examining her again on the 6th December, the commissioners 'observed that the atrophy of the arm and swelling of the articulations and back of the hand had decreased. The movements of the fingers were freer but there was no change in the appearance of the hand.'

(c) *Stoppages and obstructions.* 'Baron de W., aged thirty-four and of a bilious temperament has been suffering for three years from severe stoppages in his lower abdomen and spleen. His evacuations are bilious and frequent; his urine has a pungent smell; he breathes with difficulty and his sputum is of a lymphatic-bilious kind. Recovery from the illness is predicted.' Following treatment he claimed that 'his difficulty in breathing, the pungency of the urine and the bilious sputum had disappeared and that the stoppages had diminished. However he still felt out of sorts and looked pale.'

(d) *Other types of illnesses.* 'A. M., sixteen years old, of a bilious temperament. For five years, following a fright, he has been demented and epileptic. In spite of various repeated treatments he is still subject to fits which occur from two to three times a week. A cure was promised.' After more than fifty days of the new remedy, however, the patient 'did not show any improvement as admitted by Monsieur D'Amic himself'.

In their comment the commissioners declared that no spectacular cures were observed by them. While a few patients appeared to have derived some benefit the remaining ones showed no change in their condition. One of the features of the treatment that struck the commissioners was the fact that a number of the patients claimed to have obtained relief from their ailments when objectively no clinical alterations were noted; so much so that doubts were entertained by the commission as to the veracity of the patients' statements.

It is not known whether the commission was aware that Dr. Joseph Barth, the Maltese oculist occupying the Chair of Ophthalmology in the Vienna Medical School, had in 1777 rejected animal magnetism when he met Mesmer in connection with the case of Miss Paradis;[10] however that may be, the commissioners, relying on their own observations and judgment, stated that animal magnetism 'was not a universal remedy but only a palliative one and that when it was well conducted it could afford some relief but that it could also result in very real harm if badly administered'. They added that only the passage of time could decide whether the benefits derived from it were of a permanent character or only apparently so.

There is no hint as to what official action, if any, was taken with regard to the practice of mesmerism in Malta following the Grandmaster's consideration of the commission's report. That Monsieur D'Amic continued to practise mesmerism in Malta is shown by the fact that in May 1784 he tried to treat by means of magnetism the Order's Secretary of State for France who had become insane.[11] However, his attempt was unsuccessful and he did not escape being made the target of hostile and vigorous criticism on the part of an Italian physician, Dr. D. Calogero Vinazzo, who in a pamphlet addressed to a colleague in Malta denounced Mesmer and his pupil D'Amic as impostors. He accused D'Amic of precipitating eye diseases, defects of memory, palpitations and bleedings

[10] Vinazzo, D. C., *op. cit.*, p. 21.

[11] Doublet, P., *op. cit.*, p. 46.

from ulcerated cancers in his patients who were afterwards relieved or cured by Maltese physicians employing orthodox methods of treatment. He also accused D'Amic of purposely inducing trismus in a woman and then pretending to cure it in the presence of some Maltese physicians to impress them with his abilities.[12]

On the 12th March 1784 King Louis XVI of France appointed a commission to investigate Mesmer's claims and following the findings of this commission mesmerism fell into discredit. Compared with the report of the French savants that of the Maltese commission is not of the first order but it is historically important because it preceded the French one by some months and because it demonstrates that in those times Malta was as alive to medical developments as other countries more centrally and favourably placed in the mainstream of European culture.

---

[12] Vinazzo, D. C., *op. cit.*, p. 24.

PART IV

THE PATTERN OF DISEASE IN MALTA

CHAPTER 16

'Fevers'

In surveying the pattern of disease as it has affected the Maltese archipelago for hundreds of years we find that, as in other countries, it has shown little or no change in certain instances while in other respects it has undergone striking modifications. In his notes about the illnesses observed and treated by him from 1763 onwards Dr. Joseph Demarco refers to such conditions as measles, scarlatina, rheumatism, asthma, epilepsy, apoplexy, dysentery, anthrax and others; catarrhal, intermittent and petechial fevers, tuberculosis and scrofula are also mentioned; and such skin diseases as ringworm and favus of the scalp, scabies with secondary infection and adenitis are likewise recorded.[1]

Some diseases, such as hydrophobia and cholera, have completely disappeared; others have become endemic but lost much of their severity as in the case of diphtheria; the scourge of trachoma has been curbed; milk pasteurisation offers an effective barrier to the spread of brucellosis; and tuberculosis is under control. On the other hand poliomyelitis, which was formerly very uncommon, has on a few recent occasions reached epidemic heights, while new medical and social problems presented by the rising average age of the population have begun to make claims on our attention.

Before the specificity of disease was discovered, the therapeutic efforts of medical men aimed at the relief or elimination of the manifestations of sickness. Among these manifestations, fever (as shown by lassitude, parched and hot skin, flushing of the face and a fast, full pulse) was the most common and the easiest to observe before the advent of clinical thermometry. The incidence of 'fevers' had assumed such importance by the first quarter of the sixteenth century in Malta as to merit mention in an official report of the period. When, in 1530, the Emperor Charles V offered the Maltese Islands as a fief to the Order of St. John of Jerusalem the Grandmaster appointed a commission of eight knights to inspect the islands and report upon their general condition. The commission found, among other things, that Malta was subject to 'contagious fevers' especially in the month of August which were then ascribed to the habit of the inhabitants of soaking hemp in the marshes.[2]

[1] Manuscript 36 (Fasti morborum melitenses), fols. 24–26, 32, 34, 38–39, 83, 96 and 103, Royal Malta Library.

[2] Zammit, T., 'The Water Supply of the Maltese Islands', *Archivum Melitense*, vii, n.d., 2.

'Fevers with petechiae' were so common towards the close of the century that when plague broke out in 1592, they caused great diagnostic difficulties and many initial cases of plague were mistaken for these petechial fevers.[3] In the following century Dr. Gian Francesco Bonamico (1639–80) mentions the use of the indigenous '*fungus melitensis*' as a febrifuge.[4] In the eighteenth century Dr. Giuseppe Demarco (1712–1789) refers to the occurrence of continued and remittent fevers.[5] There was an outbreak of 'acute and malignant fevers' in 1723. A more severe epidemic in 1742 lasted eight months during which two hundred and fifty patients sought admission to the Holy Infirmary. For want of accommodation in this hospital, however, they had to be removed to a number of magazines opposite Saint Elmo Fort.[6] John Howard, a visitor to the Holy Infirmary in 1786, found a low form of fever prevailing there.[7] Another contemporary writer also alludes to the existence of fevers at the same epoch[8] while French physicians have recorded the occurrence of intermittent fevers among French troops at the end of the century.[9]

Sir William Burnett, writing in 1810, described fever cases among sailors whose ships were fitting in the Malta dockyard.[10] At the Civil Hospitals of Valletta, during the years 1821–23, the number of patients suffering from fever was, to all other diseases, in the proportion of one to seven; of these fever cases one in every six died. Naxxar, Mosta and Qormi contributed the largest number. It has been estimated that between 1818 and 1823 one out of every sixty-six inhabitants of Malta died of fever. Among the garrison, 'fever' was also the prevalent disease but a considerable number of these men, sometimes as much as one-half, were veterans who had contracted the illness while serving at Corfu, Zante and other stations in the Eastern Mediterranean.[11] Dr. John Davy states that both intermittent and remittent fevers occurred in Malta during the time that he was stationed here from 1828 to 1834. As before 1832 little attention was paid to the drawing up of the death certificate, the type of fever among the civilian population was not given in the returns of deaths. It was at Davy's suggestion that the naming of the 'species' of the fever was first attempted in 1832 and that some uniformity of nomenclature was introduced. In the table of deaths from febrile diseases prepared in that year the fevers were classified under such headings as intermittent, bilious remittent, putrid, nervous, typhoid (also known as mucous fever), slow and synochus. During the same year the total mortality from these fevers was 2,463 out of a civilian population of 102,654.

---

[3] Parisi, P., *Aggiunta agli avvenimenti sopra la peste*, Palermo, 1603, p. 59.

[4] Bonamico, G., Dissertatio de fuco spicato coccineo melitense, Manuscript 18, Royal Malta Library.

[5] Demarco, G., Fasti morborum melitenses, Manuscript 36. Dissertatio academica de febre, Manuscript 36. De febribus acutis, Manuscript 37, Royal Malta Library.

[6] Archives 1190, fols. 128–129, Royal Malta Library.

[7] Howard, J., *An Account of the Principal Lazarettos in Europe*, London, 1789, p. 58.

[8] De Boisgelin, L., *Ancient and Modern Malta*, London, 1805, *passim*.

[9] Robert, *Mémoire sur la topographie physique et médicale de Malte*, Paris, 1803.

[10] Burnett, W., *A Practical Account of Mediterranean Fevers*, London, 1816, pp. 169–180.

[11] Hennen, J., *Sketches of the Medical Topography of the Mediterranean*, London, 1830, pp. 491 and 584.

In perusing the clinical accounts of the 'fevers' left by medical men before the last quarter of the nineteenth century, it is impossible to make out their nature except occasionally as, for instance, in the case of 'sandfly fever' which was already recognised as a distinct entity by local medical men as early as 1821.[12] One is, however, at a loss to say what was the 'summer' or 'idiopathic' fever of Malta which occurred in the hottest months of the year and which was considered to be mainly produced by the heat although intoxication was also regarded as being a frequent additional cause among the troops. Then there were fevers which resembled 'genuine yellow fever' but which practitioners hesitated to label so because of differences in duration, final issue and the absence of black vomit.[13]

The recognition of enteric and of undulant fever as specific diseases and their separation from the general mass of 'fevers' began to gain ground in Malta after the Crimean War (1854–56) with the result that their more frequent diagnosis gave rise to the view that these two diseases were first introduced into the Island during that war. What actually occurred and what misled the upholders of this theory was the fact that at this period there was an unusually large number of troops in the Island and therefore the number of cases for clinical observation was more abundant than formerly. Apart from this the use of the thermometer was becoming general among clinicians while a greater number of skilful observers than usual were working in Malta at the time. These factors tended to focus attention on fevers thus resulting in the discovery of a greater number of febrile conditions that previously went unrecognised.[14]

Before the dawn of bacteriology, fanciful theories were current to explain the causation of these various forms of fever. In September 1800 'an epidemic influence of acute fevers some of them of a petechial kind' broke out among the civilian refugees at the Seminary of Mdina. A medical commission, composed of six doctors under the chairmanship of the protomedicus, was appointed to study these cases and make recommendations to arrest its propagation. The commission suggested the isolation of the sick in a large, well ventilated place, the reduction of over-crowding and the opening up of new windows and doors to promote cross ventilation. These measures sound very modern in contrast to the reasoning that prompted them. It was, in fact, assumed that 'animal bodies exhale effluvia from their mouths which when inspired by healthy persons can cause harm; indeed, animal respiration by communicating phlogiston to pure air renders the latter deleterious to health and sometimes even mortal according to the extent of its infection'.[15] Another outbreak at Zurrieq in February 1836 was attributed to the poverty of the villagers and to the consumption of barley bread which was 'dark, hard and very heavy, enough to injure any stomach'.[16] In later years much importance was attached to the part played by sweating in the production of 'fevers' and other illnesses. Dr. A. Ghio, the Chief Police Physician, writing in 1867 about a 'special fever' that occurred at Zejtun and at Zurrieq, thought it probable that the 'virus' of measles and smallpox 'being repelled by the action of a severe exceptional cold, degenerated into a new principle in the same manner as checked perspiration transforms itself into rheumatic matter'.[17] As late as 1875 the suppression of perspiration by sudden changes of temperature was held responsible for pneumonia, heart disease, apoplexy and tetanus. It was even believed that checked sweating precipitated attacks of cholera and rheumatic fever.[18]

---

[12] Hennen, J., *op. cit.*, p. 456.

[13] *Ibid.*, pp. 586 and 596.

[14] Hughes, M. L., *Mediterranean, Malta or Undulant Fever*, London, 1897, p. 16.

The standard method of treatment in 'fevers' was blood-letting which was practised with a great liberality sometimes as much as fifty-two ounces being removed at once.[19] Other means employed were the administration of calomel and of mild aperients, especially of castor oil. The application of leeches was also very much in vogue. As late as 1894 bleeding, purgation and irrigation enemas were being advocated in the treatment of undulant fever by a naval doctor stationed in Malta.[20]

[15] Manuscript 192 Università, no pagination, Royal Malta Library.

[16] Mitrovich, G., *The Correspondence between Mr. G. Mitrovich and Wm. Ewart, Esq., M.P., on the Subject of Malta*, London, 1836, p. 6.

[17] Ghio, A., *The Cholera in Malta and Gozo in the Year 1865*, Malta, 1867, p. 7.

[18] Ghio, A., *Report on the Mortality in Malta and Gozo in the Year 1874*, Malta, 1875, p. 6.

[19] Hennen, J., *op. cit.*, p. 592.

[20] Records of the Malta Branch of the British Medical Association 1888–1917, Meeting of the 28th June 1894.

CHAPTER 17

Malaria

THE summer fever to which the Grandmaster's commissioners referred in their report of 1530 was attributed to 'malaria'. It appears that this type of fever occurred quite frequently, for the municipality of Mdina had been induced to take steps against its spread before the advent of the Order of St. John. As it was then believed that 'malaria' resulted from the washing of hemp in the public fountains, this practice was prohibited by law in 1525. Whether this fever was due to malaria in the modern sense of the term cannot be determined with certainty as instances of fevers then described as quotidian, tertian or quartan malaria might have been due to causes other than this disease. The only means of recognising the disease then were of a clinical kind; on the other hand the disease is said to have been common in Italy and other parts of the Mediterranean and it is, therefore, not impossible that it might have existed in Malta. This assumption gains probability from the fact that a number of marshes existed in the Island while in recent times it has been shown that the host of the parasite—the *Anopheles maculipennis*—breeds in certain parts of the countryside.

The hazards to health presented by collections of stagnant waters were recognised several centuries ago. In 1648 legislation was enacted ordaining the closure of wells in the Qormi district following the findings of a medical commission that the waters of the wells and reservoirs around Qormi were generating 'a bad influence' on the inhabitants of the village. The law of 1648 was, however, hardly observed at all with the result that sickness continued to afflict the villagers. Another '*bando*' or decree was, therefore, published in July 1673 enforcing the covering of all wells and reservoirs in the Qormi area except for small apertures to allow the drawing of the water on a very small scale during the summer months.[1] Similar steps were taken in 1705 when the cultivation of the tobacco plant was prohibited in all parts of the Island because of the harmful qualities it was believed to impart to the atmosphere and when provisions for the control of water reservoirs were again enforced.[2]

Reference to a 'terrible' epidemic of tertian fevers, which struck the inhabitants of Rabat and Mdina between 1707 and 1709, is made in the official records of the Mdina municipality. This epidemic was ascribed to the vapours arising from the water used for irrigating the gardens and fields in the district of Gherixiem near Mdina—a belief that dominated medical thought for very many years afterwards. During this outbreak four hundred cases were admitted to hospital while another six hundred inhabitants in the Rabat area succumbed to the fever.[3] Another wave, at first of tertian and subsequently of malignant fevers, devastated Mdina and its neighbourhood in September 1754. A commission of four physicians was appointed by the Grandmaster to enquire into the causes of the epidemic and to propose the necessary remedies. The commission, after conducting a topographical survey of Mdina and its environs, reported in February 1755. They blamed the unwholesomeness of the air of the district for the fever outbreak, ascribing the fouling of the atmosphere to the water vapours generated by the surrounding fields and kitchen gardens. They, therefore, recommended that no vegetables were to be sown and planted in the vicinity of the city but they allowed the watering of artichokes and of cotton up to the month of June. These recommendations were approved by the Grandmaster and implemented in accordance with his decree of the 17th February 1755.[4]

---

[1] Manuscript 740, fol. 107, Royal Malta Library.

[2] *Ibid.*, fol. 178, Royal Malta Library.

During 1775 several hundred persons again fell victims to the fevers produced by 'infected air'[5] but no further major outbreaks occurred in the succeeding years. In 1781 another commission was set up to study the question *de novo*. They reported that while the restrictions imposed in 1755 on the planting of vegetables were to stand, they saw no reason why cotton should not be grown and watered during all seasons.[6] This recommendation was carried out but the question again came to the fore in September 1801 when an 'epidemic constitution', not dissimilar to that of 1754, again smote Mdina causing great consternation among the inhabitants. Those who escaped the infection either fled from the city or else remained to clamour for immediate steps to deliver them from their old scourge. The municipality instructed the medical staff of Santo Spirito Hospital to investigate the cause of the fever and to suggest ways and means of checking the malady. These physicians drew up a very long report in which they came to the conclusion that the illness was caused by the poisonous emanations from the stagnant waters of the valley behind Mdina. They attached the greatest importance to the function of winds in purifying the atmosphere and they took great pains to reinforce their arguments not only by quoting such authorities as Hippocrates, Ramazzini and Pringle but also by enlisting the aid of theology. In fact, they said, 'it is certain that God, the author of creation, has created the winds principally to purify the air from impure exhalations; where no winds blow the air remains foul and unhealthy so that if God had not protected human kind by ensuring the dissipation of the immense number of effluvia from the atmosphere our species would long have perished'. In the opinion of the commissioners the valley behind Mdina was inadequately ventilated as the city sheltered it from the south winds. In their helplessness against such a situation they could only recommend *in toto* the application of the remedies advocated by the 1755 commission; however, they made one very useful suggestion and that was to ensure a free flow to the waters that collected in the valley between Mdina and Mtarfa thus preventing the formation of stagnant pools near the city.

---

[3] Manuscript 183 Università, fol. 65. Manuscript 181 Università, fols. 170 *et seq.*, Royal Malta Library.

[4] Manuscript 192 Università, no pagination, Royal Malta Library.

[5] Manuscript 181 Università, fol. 170, Royal Malta Library.

[6] Manuscript 183 Università, fol. 54. Manuscript 192 Università, no pagination, Royal Malta Library.

The return to the 1755 recommendations meant a renewal of the prohibition to water cotton plants after the 8th of June of each year. This restriction involved considerations of an economic nature. In those days cotton growing and weaving constituted the chief industry of the Island. A variety of cotton goods such as coverlets, table cloths, towels and sails were manufactured and exported, a large number of countrywomen and children being employed in these occupations. It is not to be wondered at, therefore, that the 1801 report did not meet with a good reception and that another commission was appointed to re-examine the question. The new commissioners decided that while the stagnant waters round Mdina were responsible for the 'epidemic fevers' no blame could be attached to the cultivation of cotton. This decision, however, was soon reversed by another report drawn up by a certain Dr. Giovanni Agius who attributed the fever to the water vapour arising from the cotton fields and to the exhalations derived from the animal manure used as fertiliser. He condemned the watering of cotton but he also suggested the construction of a canal to drain the Gherixiem valley of its stagnant waters.[7] A covered conduit was eventually completed in 1802 and the epidemics diminished in frequency and severity in succeeding years to such an extent that in June 1809 some farmers petitioned the municipality to remove the restrictions on the cultivation of summer crops; but popular and medical opinion on the subject had not changed at all and the old prohibitions were maintained.[8]

Theories about atmospheric contamination persisted for many years. As late as 1865 it was the current medical view that 'an atmospheric air contaminated by effluvia arising from drains or by any putrid odour affects the composition of the blood of those who continually breathe them. . . . Several other bodily disorders, especially those which appear to consist primitively and chiefly in a dissolution of the blood, seem also to be occasioned by the continual inhalation of irrespirable odours.'[9]

The environs of Rabat and Mdina were not the only localities which were considered to be productive of disease. At the Marsa, at the head of the Grand Harbour, there was a morass which by the second half of the sixteenth century had already earned the reputation of being an unhealthy area. In 1650, during the Grandmastership of Jean Paul de Lascaris, it was planned to drain two marshes there and turn them into fields but owing to technical difficulties and financial reasons the scheme was abandoned. The idea was revived in 1681 when it was proposed to drain this area by means of a water-pump worked by horses and designed by the engineer Carlo Grunenberg; but even this plan fell through.[10] Steps were finally taken to remove the stagnant waters at the Marsa and convert them into arable land between 1722 and 1795.[11] Not all the marsh land in this district was, however, done away with so that 'malaria' still continued to attack the inhabitants of nearby villages, especially of Qormi.[12] In September 1793 a medical commission was appointed to investigate the nature of an illness that in forty days had affected sixty inhabitants of Qormi. The commission found that the illness was the usual endemic affection of tertian and continuous fevers that occurred annually at Qormi and was ascribed to the vitiation of the air by the stagnant waters and ponds in the village and at the Marsa.[13] Smoke was then regarded as a powerful purifying agent and with the aim of decontaminating the air of Qormi by this means the Grandmaster ordered the removal of all the bakeries in the city of Valletta to this village.[14]

---

[7] Manuscript 183 Università, fol. 53. Manuscript 192 Università, no pagination, Royal Malta Library.

[8] *Ibid.*, Università, no pagination, Royal Malta Library.

[9] Ghio, A., *The Cholera in Malta and Gozo in the Year 1865*, Malta, 1867, p. 30.

Floriana appears to have suffered also because the Capuchin friars who lived in the convent of that suburb were released from certain night devotions, the celebration of which entailed their exposure to the night air and exhalations 'at a time when the body is most susceptible of their deleterious effects'.[15]

The village of Pawla was abandoned in 1801 owing to the unhealthy effluvia from Marsa and became known as the 'deserted village'.[16] A few years previously, during the Maltese insurrection against the French, British advanced guards posted in this area suffered so heavily from 'night exposure' that they had to be withdrawn from the district. The crews of ships anchored in the neighbourhood of Marsa were attacked by fever in August and September, the fever disappearing when the vessels were moved to the vicinity of Bichi Bay, the Bichi promontory, so it was thought, affording complete shelter from the Marsa exhalations.[17]

---

[10] Dal Pozzo, B., *Historia della Sacra Religione Militare di San Giovanni*, Venezia, 1715, vol. ii, pp. 186 and 483.

[11] Mifsud, A., *Knights Hospitallers of the Venerable Tongue of England*, Malta, 1916, p. 301.

[12] Abela, G. F., and Ciantar, G. A., *Malta illustrata*, Malta, 1772, lib. I, not. VIII, para. XXXI, p. 289.

[13] Manuscript 429, Bandi 1784–1794, fol. 255, Royal Malta Library.

[14] Hennen, J., *Sketches of the Medical Topography of the Mediterranean*, London, 1830, p. 439.

[15] *Ibid.*, p. 433.

[16] Manuscript 183 Università, fol. 64, Royal Malta Library.

[17] Hennen, J., *op. cit.*, p. 431.

In August 1802 Zejtun and Zabbar, where collections of stagnant waters were to be found, suffered from an epidemic of 'remittent' and 'malignant' fevers. This was not the first time that these villages had been attacked by fever; in fact some water reservoirs had been emptied and filled up with stones at the beginning of the previous century because they had been held responsible for the production of the 'fatal diseases' that prevailed in those parts. More water tanks were put out of use and their reopening prohibited before the lapse of two years.[18]

Another marsh occupied part of the valley at the head of St. Paul's Bay then known as the swamp of Pwales. An outbreak of fever in ten inhabitants of Mosta was ascribed, in 1821, to the effluvia of Pwales where the affected individuals had resided in the autumn for agricultural purposes. During the time of the Order of St. John great care had been taken to drain this valley of the rain-water that accumulated in its bed from the surrounding hills. Four water courses had been constructed to carry away the water into the sea but these works had been allowed to fall into decay by 1821 with the result that the water retained in the valley gave rise to very offensive odours.

A further spot, considered to be of some importance in the generation of 'malaria', existed in the Quarantine Harbour. It stretched from Pietà to Msida where the water became stagnant owing to the sludge deposited by the sea.[19] A vast amount of labour was expended during the time of Sir Alexander Ball, at the beginning of the nineteenth century, in draining and filling up several of these marshes while in 1827 a Government Notice of the 16th May ordered the removal of all accumulations of stagnant waters from the various parts of the Islands of Malta and Gozo at the expense of the landowners in whose property they happened to be. During the governorship of Sir Henry F. Bouverie (1836–43) and again in 1859 the remaining swampy stretches at the Marsa were drained and converted into agricultural land.[20]

Doubts about the existence of malaria in Malta were expressed by Dr. John Davy who was on the medical staff of the British army in the Mediterranean from 1824 to 1835. 'It would be difficult', he wrote, 'to name a spot anywhere in the surface of the globe, of the same extent, more naturally arid or where there is a greater absence of stagnant water or of marsh. Much has been said of the shallows at the head of the Great Harbour and of the Quarantine Harbour; and their noxious influences have, I believe, been greatly exaggerated.'[21] The question could not be settled at that time because no advances had yet been made in the aetiology of disease. It is interesting to learn that even after Laveran's discovery of the causative agent of malaria in 1880 some forms of fever continued to be ascribed to malaria when they were due to other causes; thus undulant fever was still included in the malarial group of fevers in the 1885 edition of the *Nomenclature of Diseases.*[22] By 1897 it was definitely established that malaria, in the modern specific sense, did occur, though very rarely, in Malta; however, not all cases met with were indigenous. More often than not they were relapses of the disease occurring in individuals who had contracted the infection in India, Mauritius and elsewhere.[23] The first to prove the existence of malaria in Malta were Dr. G. Caruana Scicluna and Dr. Themistocles Zammit. In 1904 a severe outbreak of the disease affected all the inhabitants living in the neighbourhood of Kallilia behind Rabat and Mdina. Zammit discovered that the water in this area (Wied il Qliegha) was a breeding ground of the malaria mosquito *Anopheles maculipennis* which, feeding on cases of benign tertian malaria, became infected and carried the disease as far as it could fly.[24] An investigation was carried out and it was found that the infection had been imported from Crete by soldiers stationed in the nearby Mtarfa Barracks. The parasite was subsequently conveyed to some fifty residents in the neighbourhood by the anopheles that bred in the Qliegha valley (Chadwick Lakes) close by.[25]

---

[18] Manuscript 192 Università, no pagination, Royal Malta Library.

[19] MacGill, T., *A Handbook or Guide for Strangers Visiting Malta*, Malta, 1839, p. 115.

[20] Vella, E. B., *Storja ta Hal Tarxien u Rahal Gdid*, Malta, 1932, p. 215.

[21] Davy, J., *Notes and Observations on the Ionian Islands and Malta*, London, 1842, vol. ii, p. 275.

In 1919 a further small outbreak of twenty cases occurred in the district of Bur Marrad near Salini Bay. The infection was probably imported from Salonika by Maltese troops who returned home to Naxxar and St. Paul's Bay from the Eastern Mediterranean in that year.[26] Steps for the treatment of ex-servicemen were taken in November 1920 when the District Medical Officers were entrusted with the care of the malarial patients by the military medical authorities.[27]

In 1922 a patient who had never been abroad was reported from Gozo as suffering from the disease. The case was confirmed microscopically but a search for anopheles in that island proved fruitless.[28] Many years later, in 1941, a case of indigenous benign tertian malaria was diagnosed in Malta in a boy of fourteen years who lived in the Salini area and who had never been abroad. In explaining the appearance of this disease at such long intervals of time it has been supposed that our anopheles are of the zoophilic variety and that they refrain from attacking human beings as long as they can feed on cattle, a scarcity of which occurred both during the First and the Second World War due to reduced importation and increased slaughtering.[29] In 1943 anopheline larvae of the *maculipennis* species were discovered at a site where they had not been previously reported, a small pool formed by sea water at Qala San Mark about one-and-a-half miles from the known anopheline breeding place at Salini Bay.[30]

---

[22] Hughes, M. L., *Mediterranean, Malta or Undulant Fever*, London, 1897, p. 6.

[23] *Ibid.*, p. 6.

[24] Zammit, T., and Caruana Scicluna, G., 'Intermittent Fever in Malta', *British Medical Journal*, 1905, i, 711. Zammit, T., 'The Last Epidemic of Ague in Malta', *Compte-rendu du 2e Congrès International du Paludisme*, Alger, 1930, vol. ii, pp. 455–457.

[25] General Health Report for 1904–05, *Malta Government Gazette Supplement*, 20th October 1905, p. vii.

[26] *Report on the Health Conditions of the Maltese Islands for 1941*, p. 12.

[27] *Malta Government Gazette*, 4th November 1920, p. 709.

[28] *Report of the Chief Government Officer and Superintendent of Public Health for 1922*, p. 3.

[29] *Report on the Health Conditions of the Maltese Islands for 1941*, p. 12.

[30] *Ibid., 1943*, p. 24.

CHAPTER 18

Plague Epidemics

MALTA has shared with the rest of Europe, the dread, devastation and desolation attendant upon the waves of plague that since medieval times swept through the continent from east to west. The following accounts of the several visitations of plague reflect the state of the general knowledge of the disease through the different periods up to the close of the last century when the plague bacillus was discovered (1894) and the transmission cycle, rodent-flea-man, demonstrated (1898).

The story of the earliest outbreaks is so poorly documented that practically nothing except the dates of its visitations have come down to us. Of the various pestilences that invaded the Mediterranean basin since pre-Christian times the first indication of the existence, in Malta, of what is believed to have been plague occurs in 1270.[1] In the following century the Black Death reached the Island in its march across Europe in 1348. Another epidemic raged in 1427–28 and again in 1453.[2] The sixteenth century may well be called the plague century from the several invasions of the disease that afflicted the Island. An attack occurred in 1501; a second epidemic started at Birgu in 1519 and then spread to other parts of the Island; a third broke out in 1523.[3] This pestilence was imported into the Island by a galleon captured from the Barbaresques. The municipality of Mdina had ordered the burning of the ship's cargo, the submersion of the vessel to purge her from the 'contagion' and the isolation of her crew. Her owners, however, refused to comply with these instructions and the municipality was compelled to set fire to the vessel; but by the time that this step was taken plague appeared at Birgu which was then the maritime and commercial centre of the Island. The town was cut off from the rest of the country by a cordon of special guards. The residents of Birgu resented this measure, rose against the municipal authorities and imprisoned the Captain of the Rod who had gone there to see that the isolation measures decreed by the municipality were enforced. It is not known how long this outbreak lasted nor how many died of the disease but it is certain that it remained confined to Birgu.[4] Plague again invaded Malta, from Sicily, in 1575.[5]

---

[1] Ferres, A., *Descrizione storica delle chiese di Malta e Gozo*, Malta, 1866, p. 566. Ferris, F., 'The Church of Malta', *Daily Malta Chronicle*, Special Eucharistic Congress Number, April 1913, p. 24.

[2] Zammit, T., *Malta, the Islands and their History*, Malta, 1926, p. 98. Ferres, A., *Storia ecclesiastica di Malta*, Malta, 1877, p. 121. Borg, T., *Malta u l-gwaj tal pesta*, Malta, no date, pp. 1 and 2.

[3] Ferres, A., *op. cit.*, pp. 87, 454 and 458. Manuscript 1146, vol. i, fol. 226t, Royal Malta Library. Zammit, T., *op. cit.*, p. 103.

THE PLAGUE OF 1592–93

This is the first epidemic to be described by a medical man, Dr. Pietro Parisi of Trapani, who was an eye-witness of the events he has recorded.[6] The infection was introduced by the galleys of the Grand Duke of Tuscany. These ships had entered the Malta harbour after capturing some vessels loaded with merchandise that had ventured out of the port of Alexandria where plague was raging at the time. Soon after their arrival in the Island the galley crews began to fall ill. At first no suspicion of plague was entertained and the sick crew were admitted into the Holy Infirmary at Valletta. In hospital inguinal swellings and petechiae made their appearance while those inhabitants who had had business dealings with the crew also fell ill with the same manifestations. In the meantime the Tuscan galleys were sent to the Quarantine Harbour for purification. As fresh cases continued to occur, some of the galley officers fearing that the disease might be plague felt it their duty to warn the Order's government of their apprehensions and without any further delay proclaimed the ships to be plague-infected.

The majority of local medical men, however, thought otherwise. Some diagnosed the illness as venereal disease while others ascribed the formation of petechiae to the fevers that normally prevailed in the Island at that season; whatever the nature of the illness they definitely ruled out plague. There was only one physician, Dr. Raimondo Calamia, who insisted that the disease was plague but his opinion, far from gaining acceptance, only served to earn him scorn and sneers from his colleagues. While these controversies were going on, no precautions were taken to check the spread of the malady. On the contrary affected persons were permitted to mix with the healthy and the corpses of those who died of the disease were allowed to be buried in the churches as was then the custom. Instead of discouraging meetings the Health Commissioners did not prevent the Inquisitor and the Prior of the church of St. John from holding special religious functions in their churches, which were attended by dense crowds from all parts of the Island.

By the beginning of June 1592 the disease had taken a firm hold on the Island. No more doubts could by then be entertained as to its real nature. The first public health measure was taken on the 6th June when the Council of the Order, presided over by the Grandmaster himself, met and elected four knights as Health Commissioners, who immediately took steps to erect a temporary lazaretto on Bishop's Island in Marsamxett Harbour to which the patients were conveyed. A respite followed the isolation of infected persons and gradually the epidemic gave signs of abatement until it seemed to subside completely by the end of September with the death of only three hundred individuals. A solemn Te Deum was sung in all the churches, the lazaretto was pulled down and the convalescent patients were sent home although their sores were still unhealed.

---

[4] Vassallo, G. A., *Storia di Malta*, Malta, 1854, p. 251.

[5] Borg, T., *op. cit.*, p. 3. Bernard, A. V., 'Report on Plague in Malta in 1936', *Malta Government Gazette*, 3rd August 1937, p. 996.

[6] Parisi, P., *Avvertimenti sopra la peste e febbre pestifera*, Palermo, 1593. Parisi, P., *Aggiunta agli avvertimenti sopra la peste*, Palermo, 1603.

A second wave appeared on the 12th November—Valletta, Birkirkara and Qormi being very heavily hit. The Health Commissioners again proposed the re-erection of the lazaretto but on more mature consideration they came to the conclusion that as Bishop's Islet was too exposed to the winter winds, the patients risked suffering unduly from the cold. They, therefore, abandoned the idea of a lazaretto on the islet and suggested the adoption of the old infirmary at Birgu as an isolation station. This proposal was carried into effect, the patients being brought by sea to the water side of the hospital whence they were carried through an underground passage into the infirmary. Thus the transportation of plague-stricken patients through the streets of the town was avoided.

Within two months five hundred persons lost their lives. Then the epidemic again seemed to wane so that by the end of January 1593 only eight to ten patients were still detained in the infirmary. For the second time quarantine measures were prematurely relaxed though not without a good reason. When it became known abroad that Malta was infected with plague, the Island was put in quarantine by Sicily and other Mediterranean countries with the result that the supply of grain and other foodstuffs were completely cut off. The food stocks in the Island became exhausted. The inhabitants who had been spared by disease were now being menaced by starvation so that the Order was constrained to instruct the Captain General of the Fleet to seize any ship laden with corn and tow it to Malta for the 'relief of the Convent and of this poor people who are dying more from want than from the contagion'.[7]

Apart from the danger of famine there were many persons who were eager to leave the Island for Sicily but were unable to do so unless Malta was given pratique by its neighbours. They, therefore, pressed the Health Commissioners to transfer the few patients remaining in the infirmary to the house of a surgeon in Birgu so that they could declare publicly that the lazaretto had been closed and that the pestilence had ceased. The Health Commissioners, unforgetful of the famine that had desolated the Island in the previous year, were easily persuaded to follow the proposed course of action. Accordingly the old infirmary was evacuated and the

---

[7] Archives 447, fol. 251t, Royal Malta Library.

Island declared free from contagion on the 2nd February 1593. The disease, however, was far from extinguished. Its fiercest onslaught was yet to come. Cases again started to appear and to become numerous. The government was, however, reluctant to admit that plague was still present in the Island. By the beginning of March the whole country had been invaded and the government was finally forced to announce that plague had broken out again. The terror and panic that followed this announcement were overwhelming. Town residents endeavoured to escape the 'contagion' by fleeing into the countryside while those who remained in the towns shut themselves up in their homes to avoid the dreaded contact with their fellow-citizens. Those who were plague stricken tried to conceal their disease for fear of being carried to the lazaretto and having their clothes burned.

The government, realising its helplessness in fighting the epidemic, approached the Viceroy of Sicily with a request to send a plague expert to the Island to try and check the progress of the malady. The Viceroy sent a certain Dr. Pietro Parisi from Trapani who reached Malta on the 15th May 1593. Parisi found that the panic that had seized the masses had also spread to members of the medical profession. Indeed they were so overwhelmed that some of them had deserted their patients from dread of catching the disease. Many of the sick were dying without medical assistance. The scare was so great that even those who fell ill with other diseases were shunned by all and shared the same fate as the plague-stricken patients. Other doctors were accused of failing to notify cases of plague occurring among women to whom they were attached by emotional bonds or by promises of gain. Not even barbers were to be had to bleed the sick in spite of the offer of great rewards for their services. For want of corpse-carriers the Health Commissioners were obliged to engage four beggars to convey the dead and bury them during the night.

Parisi's first step was to set up a lazaretto on Bishop's Islet and to insist on the isolation of all plague patients. Initially some opposition was encountered from the knights and other influential persons who were very reluctant to part with their relatives, friends and servants; but this obstacle was eventually overcome and nine hundred persons were received in the newly established lazaretto in a very short time. He took care to separate confirmed cases from suspected ones and subjected those who recovered from the disease to a period of quarantine. Before they were allowed to return home the men had their hair shaven; women of high social standing were spared this procedure, a thorough bath of 'odoriferous' substances only being imposed upon them, but their socially less fortunate sisters were shaven in the same way as the men besides being given a wash in sea water. Those who escaped infection were isolated in their own homes for forty days, one person only from each household being permitted to leave the premises at certain stated times to run errands and procure essential provisions for the family.

The Health Commissioners were invested with great powers to enable them to maintain discipline. They were empowered to punish transgressors with flogging, forced rowing in the galleys and even with death after obtaining the sanction of the Grandmaster. Stern punitive measures were certainly needed to stop the thefts of clothing that went on. It has been recorded that even a guardian of the lazaretto did not refrain from stealing two mattresses in spite of the fact that his right arm was missing and that he had only three fingers on the left hand! Others robbed the dead of their clothes and burgled deserted houses. One of these thieves was caught red-handed, flogged through the streets of his village and condemned to the galleys for life while the stolen goods were publicly burned.

The notions held about the origin and transmission of plague were derived from Galen and Avicenna. Physical constitution, vitiated air and contagion were believed to be the main factors responsible for the generation and spread of disease. Two principal types of human bodies were recognised—the 'cold and dry' and the 'hot and humid', the latter being considered to be more prone to contract plague than the former. In fact it was held that 'hot and humid' bodies were capable of giving origin, spontaneously, to 'putrid and even pestilential fevers'. Others attributed plague to the generation, inside the body, of 'bad humours' derived from the ingestion of unwholesome food, such as bread made from fermenting grain. If the pores of the body are too narrow then these humours cannot be eliminated and plague develops. Pores, however, played an opposite role according to the 'vitiated air' theory. Indeed those with 'narrow pores' had an advantage over people with 'wide pores' since these were more liable to absorb the corrupt air through their pores and thus fall victims to the disease. Pestilential vapours exhaled by infected patients from their mouths and pores were held responsible for the conveyance of infection to healthy persons over wide distances. On this assumption was based the precaution taken by doctors to wash their faces, necks and hands with vinegar before approaching plague patients as, owing to its astringent action, vinegar was supposed to close the pores and thus prevent the penetration of the pestiferous vapours inside the body of the physician.

Infection by direct contact with the patient was dreaded most of all but contagion was believed to be capable of attaching itself to cotton and woollen goods and even to wood and metals—hence the avoidance of such fomites as clothing and other personal effects. Dogs and cats were also suspected of carrying the contagion in their hairs so that some physicians recommended the destruction of these animals in times of pestilence, as was in fact done in Valletta where all the dogs were killed and buried in deep pits dug for the purpose. Other medical men, however, were in favour of sparing the cats to prevent an undue propagation of mice. In spite of this passing reference to these rodents the physicians of those days were far from suspecting the rat as a link in the aetiological chain of plague.

The forms of therapy advocated against plague had undergone no change since the time of Galen. Preventive measures were directed at combating the contamination of the atmosphere and neutralising the pestiferous poison in the air. Fire was considered to be the most potent purifier of the air and for this reason the lighting of fires was recommended as one of the surest ways of avoiding plague. Attempts were made to alter the air in one's vicinity by means of 'odoriferous balls' which were carried on one's person for frequent inhalation. 'Odoriferous waters' for bathing the hands, nose and temples were also popular. Besides depurating the atmosphere, these preparations were believed to possess the virtue of 'renewing the spirits' and strengthening the brain and the heart. The substances contained in the balls and waters varied according to the financial means and the social status of the individual. Those prepared for the wealthy and the aristocracy were made of such costly and rare ingredients as dried eyes of stag or flesh taken from the forehead of the same animal; while those bought by humbler people were made simply of camphor, incense, myrrh and other common substances. Precious stones, such as emeralds and rubies, were thought capable of 'altering the air' and were, therefore, recommended as preservatives against plague when worn in the form of rings or hung round the neck provided that they came in contact with the skin. Bloodletting was prescribed in the belief that it relieved the body of its noxious humours.

The medical and surgical treatment of the disease had but one aim—the production of a 'universal evacuation' of the toxins from the body by purging and by stimulating copious urination and sweating. An effort was also made to attract the poison from the internal organs to the skin by opening the pores by means of massage and heat and thus eliminating it through these structures. Heat was ordinarily prescribed in the form of hot baths but for opulent patients more costly expedients were advised such as enveloping the sufferer in the carcass of a freshly killed horse or mule from which all offal had been removed. Toning up the heart and fortifying the liver, brain, stomach and testicles was regarded as being of primary importance. Electuaries, containing a piece of bone from the heart of a stag, aloe and rosewater were administered while great stress was laid on keeping next to one's heart a small purse filled with red corals, pearls, camphor, saffron and burnt horn of stag.

The local treatment aimed at the opening of the bubo and the evacuation of its contents to rid the body of the plague poison. Poultices, cupping and leeches were applied to the tumour. Incision of the skin or cauterisation with red hot irons was also much in vogue. More heroic—and strange—measures were advocated for aristocratic patients; for instance a hen or other fowl was put over the bubo with its hind part in close contact with the swelling. Mild pressure was maintained over the fowl while its beak was kept tightly closed until it died—a good prognostic sign according to the medical authorities of the time because it signified that the bird had sucked all the poison that was in the bubo. Sometimes, instead of a fowl, a dog was cut in two across its back and the raw surfaces applied to the bubo.

The epidemic showed signs of abatement towards the end of June 1593 after three thousand persons, including forty knights, lost their lives out of a population of 27,000. In an all out effort to eradicate the 'contagion' three huge washing places were set up near the sea—one in Valletta outside the Jews Gate, a second at Birgu near Fort St. Angelo and another one in the southern part of Senglea—for the purification, by washing, of all household effects that could serve as fomites. Similar measures were taken in the villages. Bonfires of resinous woods were lighted to purify the air. Houses were depurated by sprinkling the walls with sea water, white-washing of rooms and lighting of fires inside them. The streets were cleared of the filth, rags, discarded clothing and other rubbish that had accumulated in them. The soil covering the graves in which the corpses had been buried was soaked with sea water and beaten to a hard surface as a precaution against the generation of putrid vapours from the decaying bodies which were believed to be capable of causing a further outbreak of pestilence by contaminating the air. This nation-wide disinfection by washing, burning and so on lasted from the beginning of August to the end of September. As no more cases occurred, the lazaretto was pulled down and on the 4th October processions and other religious ceremonies, in which the Grandmaster, the Bishop and the Inquisitor took part, were held in thanksgiving for the cessation of the pestilence. A few days later the government approached the Viceroy of Sicily with a view to removing the quarantine restrictions imposed on the Island. Although no fresh cases of plague had appeared for four months, the Sicilian Physician-in-Chief ordered another 'ventilation' of all fomites for a period of eight days to make sure that no hidden foci of infection still lurked in the country. Accordingly clothes, cotton and woollen materials, bed-linen, mattresses etc. were taken out of the houses all over the country and exposed to air and sunshine under penalty of confiscation of these articles. Knights, public officials and prominent citizens were appointed to supervise this 'ventilation' in each street of Valletta and in every town and village of the Island. Pratique was finally granted on the 5th January 1594.

THE PLAGUE OF 1623

This small outbreak began in September 1623 at Valletta in the family of the Chief Sanitary Officer of the port, Paolo Emilio Ramuzzi. As soon as the nature of the malady was suspected, four Sanitary Commissioners were appointed by the Grandmaster to enforce the necessary public health measures calculated to check the spread of the disease, which was attributed to the effects of a 'contagion' derived from some refuse material which Ramuzzi had taken from a site that had been heavily infected during the plague of 1592–93.[8] The patients and their contacts were taken to the lazaretto on Bishop's Islet in Marsamxett Harbour. Valletta was isolated from the rest of the Island, the infected houses were specially guarded, the congregation of masses of people was prohibited and the wearing of mantles banned to avoid the coming into contact of clothes which were then believed capable of catching and communicating the 'contagion'. Commissars were appointed to visit the houses of the city every morning to ascertain whether any of the inhabitants had fallen ill with plague.

The outbreak was quickly cut short with the death of only forty persons.[9] Owing to its short duration and low mortality the disease was by many regarded as not having been plague at all; in fact it gave rise to the saying 'the plague of Pawlu Milju' which means 'no plague'.[10]

THE PLAGUE OF 1655

The disease on this occasion was thought to have been imported into the Island from the east by some ships anchored in Kalkara Creek in the Grand Harbour. The first to die was a man living in the vicinity of the quayside of this creek who, it was afterwards learned, had bought a few articles of clothing from the crews of the ships in question. His sister, who lived with him, was the next victim. She was taken suddenly ill on the 28th September and was removed to her mother's house at Zabbar where she died soon after. Her death was so unexpected that suspicions of poisoning were entertained. These fears were, however, soon dispelled by others of a more terrifying kind when other members of the family also became ill. The physician who was called to see the patients saw no cause for alarm but the barber-surgeon, who had visited the patients to perform the blood-letting ordered by the physician and who had had previous experience of plague in Sicily, noticed a very suspicious swelling in one of the sick. This tumour resembled very closely the buboes he had seen during a Sicilian pestilence. He, therefore, warned the physician that the patient was suffering from a 'contagious disease'. On examination the doctor found that the patient, besides the swelling, had also some haemorrhagic spots. The Protomedicus was notified immediately and a medical board was sent to see the patient. They reported to the government that the disease was plague.

A Board of Health was set up to advise on the steps to be taken to prevent the dissemination of the disease and to trace the source of the infection. Prompt public health measures were carried out and the death penalty was ordained for the transgressors of the Board's injunctions.[11] The two members of the family who still remained alive—the mother and a daughter—were removed to the lazaretto while their house was burned down with all that it contained. The contacts were quarantined, the village of Zabbar was cut off from all communication with the rest of the Island and surrounded with a cordon of troops to ensure its isolation.

---

[8] Archives 255, fols. 19–22, Royal Malta Library.

[9] Abela, G. F., and Ciantar, G. A., *Malta illustrata*, Malta, 1780, p. 188.

[10] Zammit, T., *op. cit.*, p. 183.

[11] Dal Pozzo, B., *Historia della Sacra Religione Militare di San Giovanni*, Venezia, 1715, vol. ii, p. 230.

The night following her removal to the lazaretto the mother died. An external examination of her body by the surgeon of the lazaretto revealed the presence of extensive bleedings while a very large bubo filled the right groin. Soon after the surgeon himself contracted the infection but eventually recovered; but some of the convicts who had been sent to the lazaretto to wait upon the patients and to bury the dead lost their lives.

In spite of the isolation of Zabbar, cases of plague appeared in Valletta, Senglea, Bormla and Birgu. These places were quarantined off and the infected houses were sealed. Famine again threatened to walk on the heels of pestilence as, owing to the disruption of internal trade and the suspension of commercial relations with Sicily, food became very scarce. The danger of starvation was averted in time by the appointment of a special commission charged with the alleviation of the sufferings of the poor.[12] The outbreak ceased to spread and remained localised to the places mentioned. The mortality rate was very low, only twenty persons being carried off before the disease extinguished itself in November of the same year.[13]

THE PLAGUE OF 1675–76

The worst visitation on record was that of 1675–76. It started in December 1675, the first known case occurring in the daughter of a merchant called Matteo Bonnici. At this period a squadron of British ships under the command of Admiral Sir John Narborough was waging a war without quarter against the corsairs of Tripoli and Algiers. His vessels used Malta as their base for the supply of provisions and ammunition but they were also in constant communication with the North African shore where plague was rampant at the time. This circumstance led to the belief that it was British men-of-war that introduced the plague in Malta in 1675.[14] This theory, however, was not upheld by others who state that the squadron eventually returned to England without suffering any casualties from plague.[15]

The diffusion of the disease was so rapid and violent that by February of the following year additional accommodation had to be provided at the lazaretto. As a means of ascertaining the incidence and the mortality of the disease, a census of the population of Valletta was taken. It was found that there were 12,144 persons living in 2,700 houses. The city was

[12] Liber Conciliorum Status Manuscript 259, fols. 129–136, Royal Malta Library.

[13] Abela, G. F., and Ciantar, G. A., *op. cit.*, p. 189.

[14] Dal Pozzo, B., *op. cit.*, p. 445. *Archivio Storico di Malta*, 1934, iv. 99.

[15] Vassallo, G. A., *op. cit.*, p. 682.

divided into twenty-four quarters, each of which was put under the charge of a knight who, with the assistance of a number of citizens, daily inspected every house in his district and reported on the state of health of its inhabitants.

As on a previous occasion the medical profession disagreed about the nature of the malady. The majority of Maltese practitioners headed by the Protomedicus, Dr. Gio. Domenico Xeberras, recognised the disease as being 'African plague' but a foreign physician in the employment of the Order maintained that it had no pestilential characters and that it was simply a 'non-contagious' malignant fever. The government favoured this opinion and the isolation of patients at the lazaretto was relaxed. As, however, the 'distemper' continued to make progress active measures were taken to stem it. Houses were cleared of rubbish, the wearing of mantles was prohibited and the concourse of people in churches was discouraged. Orders were issued to transport all patients to the lazaretto and in two magazines situated in Fort St. Elmo. Suspected cases were taken on board a few vessels anchored in Marsamxett Harbour with the aim of keeping them under observation for forty days. This step, however, soon proved disastrous for plague broke out among them and they were all wiped out.

In some places, such as Tarxien, the arrangements for the collection and burying of the corpses broke down as the fear of catching the disease took hold of the people so that the dead had to be buried in the yards and gardens of their own homes.[16] Dr. L. Axiaq, describing the gruesome scenes at Birgu, states that 'the corpses thrown out into the streets remained unburied so that the sky was their only cover while the houses were turned into sepulchres'.[17]

Meanwhile, the more thoughtful medical men of the Island, seeing that their diagnosis of 'contagion' had been disregarded by the government, entrusted the Maltese physician Dr. G. Francesco Bonamico to write a description of the epidemic and forward it to the medical academies of Paris, Florence, Pisa, Valencia and Rome for their opinion. This he did in May 1676 with the result that all these bodies concurred with him that the malady was none other than plague. This correspondence was published many years later by Dr. Philippus Cavallini, a physician in the service of the Order.[18] Dr. L. Axiaq, who survived the pestilence, also wrote a short account of its main features.[19] The punishing wrath of God is given as the first cause of the plague. Among the material aetiological factors he mentions the 'putrefaction of the body humours' and a 'vitiated atmosphere'. Certain unusual natural phenomena, such as earth tremors, eclipses and the appearance of comets (which had occurred a few years earlier) were thought to be of importance in so far as they were believed to herald pestilential outbreaks. With regard to the route of infection in the pulmonary form of the disease, Axiaq was remarkably near the truth as we know it to-day when he stated that the 'semina' of the disease invaded the body through the respiratory system. The rest of his pathogenesis, however, reflects the limited knowledge of his times. From the lungs the 'semina', according to him, invaded the heart and thence reached the 'body humours'. These disturbed humours were held responsible for the development of the buboes. Clinically he has left us an illuminating picture of the history of the illness as it manifested itself in his patients.

---

[16] Fiteni, L., *Giornale Cattolico*, Malta, 1841, p. 195.

[17] Axiaq, L., *De Postrema Melitensi Lue Praxis Historica*, Panormi, 1677, p. 97.

[18] Cavallini, Ph., *Melita Liberata a Peste*, Rome, 1690.

[19] Axiaq, L., *op. cit.*

The onset was usually sudden with fever, headache, vertigo or syncope, nausea and vomiting. Buboes, accompanied by pain, soon appeared in the inguinal regions. Swollen glands were less frequently seen in the armpits and very rarely below the ears. The buboes broke down to form ulcers and carbuncles. The patient was bathed in cold sweat and his body covered with numerous small haemorrhages which increased in size and changed into a livid or very dark hue. The tongue was very dry and blackish and the patient complained of very great thirst. The urine was at first turbid but then became dark and foul smelling. The pulse, initially rapid, became subsequently irregular and small. Clouding of consciousness, and sometimes delirium, occurred at the end.

The sheet-anchor of treatment consisted in blood-letting and the administration of emetics and diaphoretics. Among the preservatives taken internally were 'theriaca' and 'scordium'; anointing the body with various oils and washing it with rose-vinegar and solutions of arsenic were recommended for external use.

The illness continued to spread. The feeling of frustration and despair has been aptly expressed by the anonymous writer of a booklet on this epidemic who thus referred to plague: '*Flagellum quippe Dei est, et malum, cuius remedium sibi ipsi soli reservavit omnipotens.*'[20] In their consternation the government sought medical aid from abroad. On the 26th May a Neapolitan surgeon was brought over and on the 8th June a French physician, Monsieur Spiril of Marseilles, accompanied by a profumator, also came to Malta to treat the sick.[21] A Capuchin friar who had gained a reputation for treating cases of plague during a recent outbreak at Genoa was also brought here. These 'experts' confirmed the existence of plague, insisted on the transportation of the patients to the lazaretto and on the isolation of the healthy in their own homes from the 12th June to the 9th August. Houses and clothes were disinfected with a mixture containing no fewer than fourteen ingredients among which were sulphur, arsenic, litharge and asafoetida; patients' clothing was burned and the streets thoroughly cleansed.[22] The safeguarding of the public health was made the supreme law. The Rev. Henry Teonge who visited the Island during this epidemic relates that towards the end of July a man was hanged for stealing goods from infected houses and selling them in town. A ship that was so heavily infected that 'whosoever cam in her dyed with in two hours' was burned.[23]

---

[20] Anonymous, *Brevis et apologetica tractatiuncula de peste*, Panormi, 1681, p. 58.

[21] Manuscript 10, fol. 307, Royal Malta Library.

[22] Dal Pozzo, B., *op. cit.*, p. 447.

The virulence of the disease began to abate gradually until by the 24th September 1676 the Island was declared free from plague and commercial intercourse resumed with neighbouring countries. The mortality figures have been variously given. Some estimate that out of a population of 60,000 souls 8,569 died of the disease while others put this number at 11,300—9,300 in Valletta and the other towns and 2,000 in the countryside.[24] The knights suffered so severely that while before 1675 each galley had twenty-one of them when she sailed on a 'caravan', only eleven were available for the Admiral's galley and no more than nine for the other ships after the epidemic.[25] The knights who died from the disease were buried without ceremonial 'outside the walls of Valletta' in the little church at Pietà.[26] Among its victims were also a number of priests and friars, sixteen surgeons and ten physicians.[27] No cases occurred at Mdina;[28] the island of Gozo also escaped completely although a few suspected cases were isolated in the church of St. Gregory.[29]

THE PLAGUE OF 1813–14

During the first decade of the nineteenth century, thanks to the state of warfare between England and France, Malta became the main Mediterranean port of the British navy and a great centre of European commerce to which flocked many merchants who had escaped from the continent. This prosperity, however, was soon brought to an abrupt end by a widespread plague epidemic. Though no large-scale outbreak had afflicted the Island since 1675, cases of plague had on several occasions cropped up on board ships hailing from infected ports in the Levant. Cases also occurred among passengers quarantined in the lazaretto. A more serious threat caused some alarm during the rule of Grandmaster Em. De Rohan when plague broke out in the prisons at Valletta; fortunately it was immediately stamped out before it could spread to the inhabitants.

At the beginning of 1812 plague appeared in Constantinople. Thence it spread to Smyrna, Cyprus and Alexandria. An official report from the British Consul at Alexandria was sent to the Government of Malta in January 1813. As the bulk of the commerce of the Island was then with the East the quarantine rules were enforced with a greater strictness than usual on vessels arriving from the East by way of precaution.

---

[23] Teonge, H., *The Diary of Henry Teonge*, London, 1825, p. 196.

[24] Abela, G. F., and Ciantar, G. A., *op. cit.*, p. 191.

[25] De Boisgelin, L., *Ancient and Modern Malta*, London, 1805, vol. i, p. 207.

[26] Archives 645, fol. 311, Royal Malta Library.

[27] *Storia della Società Medica d'Incoraggiamento*, Malta, 1845, p. iv.

[28] Vassallo, G. A., *op. cit.*, p. 683.

[29] Farrugia, G., *Ghawdex bil grajja tieghu*, Malta, 1936, p. 113.

On the 28th March three vessels from Alexandria, one of them the Maltese brig *San Nicola*, entered Marsamxett Harbour with plague cases on board. The crew of the *San Nicola* was interned in the lazaretto and their vessel was isolated in an inlet of Marsamxett Harbour and put under the surveillance of the boats of the quarantine station after its holds had been sealed by the crew. The other two ships were ordered to leave the Island on the following day. In spite of these measures the Health Board were feeling uneasy at the presence of a plague-infected ship in the harbour and on the 29th March they drew the attention of the government to the serious danger to which the Island was exposed through the infection on the *San Nicola*. They recommended that the ship and its cargo be destroyed by burning at a safe distance from the shore. The owners of the ship, however, proposed sending the *San Nicola* back to Alexandria or else being granted compensation for the loss sustained in case the brig was destroyed. The Board of Health were adamant in their resolution that the ship should be burned; as, however, no agreement was reached between the government and the owners of the ship as to the amount of compensation to be paid, it was finally decided to allow the ship to depart and proceed to Alexandria. She left on the 10th April after an ill-fated stay of thirteen days.

On the 7th April two members of her crew had died of plague at the lazaretto and not long after the disease appeared in Valletta. On the 16th April the daughter of a shoemaker, Salvatore Borg by name, who lived at 227 St. Paul's Street, Valletta, fell ill. She was seen on the 19th by Dr. Fco. Lorenzo Gravagna who, although suspecting plague, hesitated to diagnose the disease as such for its manifestations were, in his opinion, rather dubious. The girl died within a few days. Some hours after her death her pregnant mother was attacked by a high fever, violent headaches, vomiting and pain in the inguinal regions. Dr. Gravagna held a consultation with various physicians including the Protomedicus. The result was the submission to government of a report in which they declared that they strongly suspected the case to be plague. The woman died on the 4th May and when the corpse was examined the declaration of Dr. Gravagna and his colleagues was confirmed. The Board of Health was informed of these happenings and, after meeting in an extraordinary session, it warned the government that the public health was in grave and imminent danger. On the Board's recommendation the corpse of the woman, which in the meantime had already been conveyed to the church for burial, was removed therefrom under military escort and buried in a grave apart in the cemetery outside Valletta. The shoemaker himself was taken violently ill on the same day and died at the lazaretto. His house was sealed and a guard mounted at the door. The contacts were isolated under observation at Fort Manoel.

On the 5th May it was officially announced by the government that it was strongly suspected that plague had reached the Island. As a precautionary measure the Courts of Justice, the theatre and other places of public resort were ordered to be shut. Valletta with its suburb and the three cities of Senglea, Bormla and Birgu were placed under medical surveillance. An embargo was laid over all vessels until the nature of the malady had been satisfactorily determined. These events threw the town population into alarm and confusion. Many shut themselves up in their own houses while others abandoned the cities and sought safety in the countryside. Foreigners hurried to embark on all available ships to escape from the Island.

On the 7th further orders were issued by the government. All communication between ships and the shore and the sale of 'susceptible goods' were prohibited. The inhabitants were advised to avoid, as much as possible, every kind of contact with one another and also instructed to restrain their cats and dogs from roaming in the streets. The garrison medical officers formed themselves into a committee and drew up a series of regulations calculated to prevent the spread of the infection. They recommended a general purification of the Island through the cleansing of houses and clothing, white-washing of rooms, scrubbing of pavements and burning of all articles susceptible of contagion.

The disease at first made headway slowly so that the great majority of the population, after the initial excitement had quietened down, began to doubt the existence of plague in the Island and to neglect to obey the instructions contained in the official announcements. This attitude of incredulity was also fostered by the stand taken by a few doctors who, unconvinced of the pestilential nature of the malady, persisted in diagnosing cases of plague as 'malignant' and 'petechial' fevers. Diagnostic difficulties were increased by the fact that hardly any distinction was made in those days between the suppurating buboes of plague and the ordinary carbuncle so that the one was commonly mistaken for the other.[30] An apothecary was so unconvinced of the existence of plague that he suggested the performance of necropsies on those dying during the epidemic to determine its real nature.[31]

The government, realising the danger arising from this incredulity, endeavoured to counteract it by publishing an account of the plague that had afflicted Messina in 1745 to impress the people with the fatal consequences produced in that city by the unwillingness of its inhabitants to believe in the real character of the malady and by their negligence in carrying out the directions issued by the public health authorities. The people were also cautioned not to betray themselves into a sense of false security by the circumstance that the disease was advancing very gradually; but this warning was not heeded by the populace who, as one who lived through the epidemic said, needed very severe measures and more obvious and terrible evidence to convince themselves of the great dangers with which they were threatened.[32] That evidence was not long in appearing.

---

[30] Burrell, W. H., *Appendix to the Second Report on Quarantine*, London, 1854, pp. 82–91.

[31] Manuscript 1164, fol. 9, Royal Malta Library.

The illness began to assume alarming proportions on the 16th May. Many deaths were announced in Valletta. On investigation communication was found to have taken place between the persons attacked and those previously declared to have been infected among whom were the father and son of Salvatore Borg. The traditional distrust and fear of the lazaretto, so deeply rooted in the masses, led them to the pernicious practice of concealing every kind of illness and of treating themselves in secrecy as best they could in order to evade admission to the quarantine station. This evil was aggravated by the theft of clothing belonging to plague-stricken patients. As soon as these happenings were made known to the Civil Commissioner, Lieutenant-General Sir Hildebrand Oakes, he issued a proclamation on the 17th May ordering all heads of families to make an immediate report to the Board of Health of the slightest appearance of sickness in their respective dependants under the penalty of death. Concealment on the part of any adult was also made a capital crime. A reward was offered to anyone revealing instances of concealment of the malady and of the theft of 'infected' articles. A reward of one thousand 'scudi' (equivalent to about £84) was promised to anyone who could demonstrate without any shadow of doubt the real cause of the propagation of the disease. Needless to say this hope was never fulfilled although theories and speculative explanations were not lacking.

The most generally accepted hypothesis blamed the *San Nicola* for the importation of the disease into the Island. It was believed that 'susceptible' articles had been stolen from the infected ship by the health guards or other persons, deposited in a wine shop in Sliema near the quarantine harbour and then sold to Salvatore Borg, the shoemaker. In favour of this theory was the fact that some of the health guards detailed to watch the *San Nicola* were among the first to be attacked, that these guards used to resort to the wine shop in question (where the child of the owner fell victim to the disease), that they had been in the habit of selling articles which they obtained from ships to the shoemaker and that the persons who were next attacked were those who had made purchases from Borg.

Others, among whom were medical men, were of a different opinion, laying great stress on the safe return to Malta of the crew that had been sent on board the brig to return her to Alexandria and on the absence of the slightest indication of disease among any of the persons that handled her cargo. They maintained that plague, although not recognised as such, had been lurking in the Island before the arrival of the *San Nicola*; they held that it was probably introduced by means of linen imported from

---

[32] Depiro, G. M., *Ragguaglio storico della pestilenza che afflisse le isole di Malta e Gozo negli anni 1813 e 1814*, Livorno, 1833, p. 19.

Alexandria and smuggled into the Island in contravention of the quarantine regulations.[33]

Both these theories were based on the assumption that plague was a contagious disease, contagion being traced to the most astonishing circumstances. Stories were current—and believed—of how the disease was contracted through a pair of new shoes which had not hung for a fortnight before being worn; how a piece of beef or money had not been immersed long enough in vinegar or water before being touched; how a doctor fell victim to the disease through touching a bubo with the end of his stick; and how a painter had trodden upon a piece of old rag in the street and, though abandoning his shoes, was attacked and infected his whole family.[34] Still another view prevailed. It was held that plague originated in an 'infected atmosphere' charged with the corrupt and putrid exhalations emanating from the regions of the Levant and more especially from the River Nile. Considerable dependence was, therefore, placed by the followers of this theory on a change in the state of the atmosphere with the advance of the warm season. They hoped that if 'infection' could be avoided until the summer heat set in, the disease would then extinguish itself. The consequence of this theory was a careless disregard of the warnings issued by the health authorities aimed at restricting a free intercourse among the population.

The government upheld the contagionist doctrine and its health policy was planned accordingly. To ensure a better observance of the regulations already published Valletta was divided into districts every one of which was placed under the supervision of three deputies. A corps of Volunteer Guards was organised from among the residents. These guards never moved out of their own streets but did duty at the doors and windows of their own homes. Their business was to see that all 'susceptible' articles of food were immersed in water for at least half an hour; that all filaments of thread, wool, etc. were removed by pincers and burned; that all coins received were passed through vinegar; that members of the family anointed themselves with oil as a preservative and that all contact with vendors, water-carriers and so on was avoided.[35] In order to prevent the concealment of disease heads of families were obliged to affix to their house door a list of the names of all members of the family who were enjoined to present themselves to the district deputies whenever the latter requested them to do so. On the 29th May the Bishop, in a pastoral letter, ordered the closure of all churches to avoid the risks arising out of the conglomeration of large masses of people.

In spite of these precautions, the disbelief in plague not only persisted but was maliciously fostered by various individuals, so that the government was constrained to lay down severe penalties for those who spread misleading rumours as, for example, that the epidemic was due to the effects of bread made of deteriorated grain.[36] A reward of one thousand 'scudi' was offered to anyone revealing the identity of these persons. To convince the ignorant a formal declaration confirming the existence of plague was published over the signatures of fourteen Maltese and three English physicians. Still the people, instead of avoiding unnecessary contact among themselves, continued to crowd the markets, shops and streets. By a proclamation of the 29th May the Civil Commissioner enforced the closure of shops between sunset and sunrise. A curfew was ordered and no one, except public servants, was permitted to leave his house after sunset under pain of severe penalties.

---

[33] Hennen, J., *Sketches of the Medical Topography of the Mediterranean*, London, 1830, p. 502.

[34] Burrell, W. H., *op. cit.*, p. 20.

[35] Martin, R. M., *History of the British Colonies*, London, 1835, vol. v, p. 195.

Towards the end of May the disease reached Mdina. Thence it spread slowly and insidiously throughout the countryside. Birkirkara was severely hit. It was then one of the most populous country towns, its population having been augmented by more than three thousand refugees from Valletta. The total number of deaths was one hundred and eleven by the end of the month, with a far greater number of attacked and suspected cases. The Board of Health viewed these happenings with the gravest concern. They advised the Civil Commissioner to impose still more stringent restrictions on the movements of the population such as the closure of markets, the isolation of families within their own homes and the suspension of all communication between the four cities and the countryside except for the transport of foodstuffs. None of these measures was, however, carried out as the expense entailed by them appeared to the government to be too high, but on the 3rd June the Civil Commissioner had no option but to enforce, although only partially, some of these recommendations. The districts into which Valletta had been divided were shut off from one another by barricades and gates guarded by a civic guard armed with swords. Infected and suspected houses were marked by a distinctive sign during the day and by a burning light at night to warn passers-by. A body of men was formed to supervise the lime-washing and cleansing of houses of those who died of plague, protecting the property found therein and removing therefrom all articles 'susceptible of contagion' and burning them. A philanthropic society was set up by the richer inhabitants of the Island for the assistance of the poor and destitute.

As all the grain of the Island was stored in Valletta and Floriana, the country people had to enter these towns to obtain their supplies. To avoid this contact between town and country no more grain was issued in the city; instead a machine for the delivery of grain was constructed on the top of the fortifications of Floriana and a new gate opened in an adjacent part of the bastion. The carts from the countryside were made to enter this gate, the corn being loaded into them from the machine as they moved on to drive off through another gate into the open country.[37]

[36] Manuscript 1318, no pagination, Royal Malta Library.

[37] Hennen, J., *op. cit.*, p. 531.

Towards the end of June the lazaretto was full and patients had to be admitted to Fort Manoel where a great number of huts had been constructed. The patients were carried from their homes on litters formed of rope-net coated with tar and of two sheets of oil cloth, one to serve as bedding and the other as a covering. These materials were chosen because they were considered to be 'non-susceptible to contagion'. This fear of contagion obtained such a hold on the people that strong measures were advocated against litter-bearers who dared touch clothes and other property belonging to the sick or to the dead. It was even suggested that these men should be searched by the officials, charged with the removal of patients and corpses from houses, and shot dead there and then if found in possession of clothing belonging to plague-stricken patients.[38] At first the dead were taken for burial in ordinary carts but later on a large wooden box on wheels drawn by a horse was put into use. Besides four convicts for handling the corpses, four Health Guards armed with pistols and swords accompanied the vehicle to keep people from approaching the hearse.[39]

The inhabitants of the two slums of Valletta—known as Wells Street and 'Manderaggio'—were transferred to Fort Manoel as owing to the large number of people crammed together in these districts, the disease threatened to wipe out all the residents. Gradually the ranks of such public servants as health guardians and civic guards became depleted. Wet nurses and corpse-carriers were decimated and could not be replaced in spite of the substantial rewards offered by the government. While the problem of feeding babies was solved by putting them on goats' milk there was no other way of providing corpse-carriers except by pressing convicts into this service. They were dressed in outsize sheets, hoods and gloves and trousers of oil skin after the manner of the '*sarrots*' employed during the plague of Marseilles of 1780 on the assumption that with these protective garments infection would be avoided. Similar dresses were issued to hospital medical officers but they produced such profuse sweating that both doctors and convicts discarded them owing to their exhausting effects.[40]

Under the supervision of a military escort, the convicts were made to drive the dead-carts, convey patients to the lazaretto, clear infected houses of furniture and clothing and remove corpses for burial in large pits that were covered with lime to hasten decomposition. At the lazaretto numbers of Turks, Greeks and Jews were employed as attendants in the hope that owing to their familiarity with plague in the Levant they were well fitted to treat patients stricken with this disease. 'The scenes of terror, disease and mortality can better be imagined than described', wrote a British physician. 'Increasing mortality and the dread of want produced the most distressing feelings amongst every class of the inhabitants heightened by the hourly passing of the dead cart driving with all the rapidity that its encumbered state would permit. . . . These scenes were not confined to any particular part of the town or its suburbs but alike extended to every street, lane and alley; the transfer of the sick, the dying, the dead and the suspected being an hourly occurrence and an object of constant contemplation.'[41]

---

[38] Manuscript 1020, no pagination, Royal Malta Library.

[39] Manuscript 1162, fol. 33, Royal Malta Library.

[40] Hennen, J., *op. cit.*, p. 521.

Notwithstanding these heartrending happenings the disbelief in the existence of plague had not yet been eradicated. The precautions and restrictions imposed by government were ill tolerated and frequently evaded. The rumour was spread that the doctors were poisoning their patients in order to increase the mortality and justify their diagnosis of plague. To make matters worse a divergency of views arose between the Board of Health and the Civil Commissioner. The Board had been insisting throughout the epidemic on the adoption of stricter measures of isolation but, seeing that their recommendations were not being carried fully into effect for reasons of economy, they resigned on the 28th June. The following day another body, known as the Council of Health, was appointed of which the Civil Commissioner and the Physician-in-Chief formed part. Meanwhile eight hundred persons had died of plague, which now began to attack the soldiers who had so far remained immune. More stringent steps were taken on the 11th July on the advice of the Council of Health to limit the circulation of civilians between the capital, the other towns and the villages. A few days later this measure was extended to within Valletta itself. Still the incidence of mortality rose to fifty and even sixty a day while that of morbidity was double these figures.

Villa Bichi, to-day the naval hospital, and the convent of St. Philip Neri at Senglea were turned into temporary hospitals for patients from the three cities.[42] At Zebbug a hospital of over a hundred wooden huts was constructed in a field without the shade of a tree to protect the huts from a scorching sun in the hottest season of the year. Great mortality took place here.[43] At Rabat part of the convent of St. Dominic was adapted as a plague hospital on the 3rd July after the friars, with one exception, took refuge in the seminary of Mdina. Only Father Rosario Bugeja elected to remain in the newly established hospital of which he was appointed Superintendant by the municipality of Mdina. He contracted the disease but recovered. Another section of the convent—the Novitiate—was reserved for the isolation of contacts. Only four patients are mentioned as having been admitted to this hospital during the five months of its existence. Two of them were undoubtedly cases of plague and died within a few days.[44]

---

[41] Tully, J. D., *The History of Plague as it Has Lately Appeared in the Islands of Malta, Gozo, Corfu, Cephalonia, etc.*, London, 1821, p. 54.

[42] Borg, T., *op. cit.*, p. 16.

[43] Burrell, W. H., *op. cit.*, p. 32.

[44] Giuliana, Parte Quarta, 1805–1827, fols. 152 *et. seq.*, Archives of the Convent of St. Dominic, Rabat, Malta.

The number of cases at the lazaretto and Fort Manoel became so great that order could no longer be maintained. In the confusion that ensued the patients were huddled together irrespective of age and sex. To cope with the ever mounting number of the sick that could not be accommodated in these establishments, numerous small wooden huts were erected for their reception in the ditches round Porte des Bombes, Porta Reale (Kingsway) and Porta Sant'Anna at Valletta and Floriana. The scenes of human suffering and misery that occurred in these so-called hospitals have been graphically recorded by eyewitnesses. Dr. (afterwards Sir) Brook Faulkner states that the 'miserable creatures lay within a very short distance of each other, five or six on the floor of the same room; twenty-eight of them were attended by two convicts. They had no change of linen and were, therefore, obliged to lie either without shirts or in their foul every day clothes.'[45] Some of these patients were delirious and violent, hurling themselves against doors and walls until they fell down exhausted; others lingered on in a protracted agony made unbearable by fierce headaches and thirst; others stared fixedly and vacantly in a stuporose state throwing blood from their nose and mouth. Against this repellent background of misery and death the most primitive urges of man still claimed, and obtained, satisfaction. 'There', says another writer, 'among a confused mass of human beings of every sex, age and condition, the lascivious dared to satisfy his criminal wishes and those who coveted the wealth of others did not fear to lay their hands on it until they themselves fell victims to the wrongs that they had committed.'[46] To these misdeeds were added those of the convicts who plundered houses, violated helpless women and heaped the dying with the dead in their carts. 'Apart from the fear which they inspired as malefactors, their red and black clothes which covered them from head to foot, their savage looks, their rough and bronzed countenances which showed from under their hoods worn carelessly over their heads—all these presented a sad and horrible spectacle giving to these men the appearance of malignant genii destined to preside over human destruction.'[47] Although these convicts were under the surveillance of military guards few of the soldiers dared to oppose them, but instances have been recorded where there was no hesitation on the part of the guards to resort to force to restrain the convicts from plunder. When, finally, the Maltese convicts were struck down by the disease a batch of fifty Sicilian prisoners were brought to Malta but they too eventually succumbed.[48] To compensate for the excesses of the convicts there were many benevolent persons among all classes of the population who performed acts of charity and even sacrificed their own lives in caring for the sick and the dying.

By the end of July, 1,595 persons had lost their lives, many of the sick dying without spiritual assistance at Floriana where no priests were available;[49] yet the masses still continued to disregard the regulations aimed at stemming the diffusion of the plague. On the 1st August the government declared its intention to carry out the death penalty against all those who concealed the presence of plague or stole 'susceptible' goods from infected places or changed their abode without the licence of the Council of Health. This threat was soon executed. A horse-driver, employed at the 'Ospizio', was discovered to be suffering from plague which he had failed to disclose to the sanitary authorities. He was tried and condemned to death and, although gravely ill, was shot in Merchants Street, Valletta. A short while after, a petty police officer was also found to be suffering from the disease which he had been concealing for some days; before, however, he was brought to justice he shot himself in the head.

---

[45] Burrell, W. H., *op. cit.*, p. 23.
[46] Depiro, G. M., *op. cit.*, p. 50.
[47] *Ibid.*, p. 50.
[48] Manuscript 1162, fol. 33, Royal Malta Library.

Towards the end of the month there was a slight decrease in the incidence of cases. It was then a common belief that cotton gathering was a dangerous operation during plague epidemics as it was supposed to cause a recurrence of the malady. Cotton was then grown extensively in the Island and it was usually picked in the last week of August; by way of precaution, therefore, the government decreed that none of the cotton was to be gathered but was to be disposed of by allowing cattle to graze on it. What remained of the crop was destroyed by burning. By far the greatest number of cases that occurred in this month was contributed by Qormi, Zebbug and Birkirkara—places that had gained a reputation for breaches of sanitary laws. Ultimately the government had to isolate them by means of cordons of armed men and to enforce the death penalty against anyone who tried to pass through without the necessary permit. With the exception of these areas, the epidemic continued to abate so that the number of casualties was only 674 in September.

At the beginning of October the Civil Commissioner, Lieutenant-General Sir Hildebrand Oakes, left the Island on grounds of ill health and was succeeded by Lieutenant-General Sir Thomas Maitland as Governor and Commander-in-Chief on the 3rd October. Maitland is one of the most interesting and controversial figures in Maltese history. He has been labelled by some 'a rough old despot' while others praise him as a good legislator and reformer. Undoubtedly he was a strong and energetic ruler. Maitland had acquired considerable experience of plague in Corfu and Cephalonia before coming to Malta. Soon after his arrival here he assembled the medical profession and asked them how they could tell whether a given disease was plague or not. Having obtained no satisfactory reply to his query he remarked that he knew at least as much as they did and that the whole cure consisted of two procedures—care and separation—the rest being nonsense.[50] Acting on this maxim he immediately took steps to cut short the already declining epidemic. He replaced

[49] Borg, T., *op. cit.*, p. 15.

[50] Laferla, A. V., 'Sir Thomas Maitland', *Archivum Melitense*, 1910, i. 52.

the convicts, very few of whom had by then remained alive, by prisoners-of-war to whom he promised their freedom at the end of the plague. He reorganised the medical services into a more efficient force; he enforced a stricter isolation of the villages of Qormi, Zebbug and Birkirkara and ordered the depurators of houses to work under military guard. That section of the medical profession who upheld the atmospheric theory of plague was at loggerheads with Maitland but as the number of cases kept on diminishing they were cowed into silence and Maitland is said to have remarked that the atmosphere had become frightened of his police.[51]

When no more fresh cases were reported from Valletta and Floriana, Maitland gave orders, on the 13th November, for a general purification of houses and clothing in these towns. The bishop, in support of this measure, issued a pastoral letter exhorting the people to carry out the instructions of the civil authorities and to refrain from concealing any object 'susceptible of contagion' under pain of excommunication. A few days later the purification was extended to the rest of the Island with the exception of Qormi, Birkirkara and Rabat. By the beginning of January 1814 pratique was granted to the inhabitants of Valletta and the three cities and on the 29th communication was established between the towns and the countryside, Qormi excepted. As plague still raged in this village, Maitland resorted to its conversion into a sort of lazaretto by shutting its inhabitants in their own precincts, surrounding it with a double wall, blocking all roads leading out of it and establishing within these walls several military cordons. A military commission was set up for carrying out martial law. A few law-breakers were condemned to death.[52]

By the 7th March the epidemic had extinguished itself but not before invading Gozo which, thanks to the strict quarantine measures adopted in that Island, had so far enjoyed a complete freedom from plague during the whole period of the disease in Malta. Men armed with muskets were posted along the shores of that Island to keep boats, trying to approach the coast, at bay.[53] The introduction of plague into Gozo was traced to a health-guard from Malta who went to Gozo to visit his daughter.[54] Another theory blamed a Gozitan, Angelo Galea, who resided in Qormi. Before this village had become effectively isolated Galea concealed a box containing some clothes in its neighbourhood. When plague had almost ceased in Malta and all restrictions were being removed, Galea went to Gozo carrying with him the box which he had hidden. He died after a very short illness at his home in the village of Xaghra on the 18th February 1814. Ten days later his daughter was dead. The grave-digger who buried the first victim died on the 2nd March. The Governor, after ascertaining that these individuals had died of plague, promptly cut off all communication with Gozo under penalty of death and isolated the village of Xaghra by means of a double military cordon. The residents of Xaghra were confined to their houses until the end of March when they were evacuated to a camp set up in the plain of Ghajn Lukin near the Plague Hospital which was established on the outskirts of the village in a large house known as 'tal Fewdu'. The camp consisted of a number of tents adjacent to a large area in which all the village animals were confined. This arrangement lasted until the 13th June when both people and beasts were allowed to return to their habitations. The disease thus remained confined to Xaghra. The number of persons who died was one hundred and four. This figure includes two men who were shot dead—one by a police officer because he was found roaming the streets probably in a delirious state; and another by a firing squad for trying to conceal that he was infected with plague. The physician of the Plague Hospital also died of the disease.[55]

---

[51] Laferla, A. V., *British Malta*, Malta, 1938, vol. i, p. 98.

[52] Tully, J. D., *op. cit.*, p. 61. Depiro, G. M., *op. cit.*, p. 71.

[53] Manuscript 1162, fol. 50, Royal Malta Library.

[54] *Ibid.*, fol. 123, Royal Malta Library.

Free pratique for Malta and Gozo was proclaimed on the 8th September 1814. In Malta 4,572 died of the plague out of a population of over 100,000 souls,[56] the mortality being about eighty for every hundred persons attacked.[57] The town of Senglea claimed to have enjoyed a total exemption from the disease though this has been disputed. It is a fact, however, that the quarantine laws were nowhere so scrupulously adhered to as in this town. Through the influence and exertion of the many Levant traders that resided in this town, Senglea was well sealed during the whole period of the epidemic and all communication with surrounding areas was cut off. Qrendi did the same and suffered no casualties while Safi also remained free of the pestilence.[58]

It was noted by medical practitioners that people living in cellars and ground floors were more often attacked than those who occupied the upper floors, so that plague became known as the disease that 'seldom went upstairs'. The real significance of this observation, however, eluded them at the time so that in later years the relative freedom from plague in the upper floors was ascribed to proper ventilation and the absence of dampness rather than to the fact that rodents were more likely to be found in cellars and ground floors than in other parts of the house. Twenty medical practitioners are known to have been attacked, thirteen of whom (including Dr. F. L. Gravagna who diagnosed the first case) lost their lives; the fate of four is unknown.[59]

That medical treatment was of little or no avail against plague was fully realised but great weight was attached to preventive measures of a medical kind. Among the 'preservatives' recommended against the disease was the oral administration of leaves of 'ruta', verbena and calendula and wine infusion of rosemary.[60] Fumigation with nitric and sulphuric acids was employed in hospitals; the smoke of straw and the fumes of vinegar were also used while the most unqualified praise was bestowed on the alleged beneficial use of camphor. Tobacco leaves were placed between the fingers of the attendants and the wrists of the patients to avoid catching the disease. The Commander-in-Chief of the garrison had so little faith in this procedure that he prohibited service medical officers from feeling pulses through tobacco leaves under penalty of quarantine for fifteen to thirty days.[61]

---

[55] Manuscript in the possession of Mr. Joseph Attard, Xaghra, Gozo.

[56] Depiro, G. M., *op. cit.*, p. 82.

[57] Hennen, J., *op. cit.*, p. 531.

[58] *Ibid.*, pp. 511 and 530.

[59] Burrell, W. H., *op. cit.*, pp. 27 and 30.

[60] Manuscript 1284, no pagination, Royal Malta Library.

Oil frictions were very much in vogue. The comparative immunity of British soldiers employed among the sick was ascribed by the Head of the Army Medical Department to their practice of anointing themselves with oil. Vaccine against smallpox was resorted to in the expectation that it would act as an antidote to plague. Large sums of money were spent by the government in the work of expurgation. The expurgators marched through the streets by beat of drum and sound of bugle to warn the inhabitants and passers-by of their approach. Articles of food were immersed in water for at least half an hour before being consumed.[62]

The plague left Malta with a depleted Treasury and a shattered economy. The declaration of peace on the downfall of Napoleon in 1814 contributed to the further impoverishment of the Island by diverting commerce to other ports[63] and it was very long before Malta recovered its prosperity.[64] The ravages wrought and the terror caused by this epidemic remained alive in the memory of the people for many years to such an extent that as late as 1851 it was felt necessary to take drastic measures to prevent a recurrence of the epidemic when the remains of eight persons who died of plague in 1814 at Xaghra had to be disinterred and removed from their sealed tombs in connection with the erection of a new church in that village. The tombs were opened under the personal surveillance and direction of the Physician of the Lazaretto, the Superintendent of Quarantine and the local police. The contents of the graves were transferred to an expressly prepared tomb which was then covered over with large blocks of stones and sealed up with iron bars! The old graves were depurated and left exposed to the air for a period of ten days, access to the public being prevented by blocking up the area in which the tombs were situated. As an added precaution the four individuals who performed the work were taken to the lazaretto to undergo a quarantine of twenty days.[65]

THE PLAGUE OF 1917

For over one hundred years Malta remained free from plague although on several occasions infected ships entered the harbours with plague cases on board. In 1897 a serious dispute arose between the local health authorities and the Colonial Office concerning the transport ship *Dunera* which arrived here in January with five hundred troops from Bombay where plague was raging. Indian ports had been put in quarantine by the Malta Government and public opinion was against the ship being freely admitted for fear of introducing the disease into the Island. Although no cases of plague had occurred on board during the voyage, the health authorities were reluctant to assume the responsibility of granting pratique to the *Dunera*. The Colonial Office disagreed with the decision of the Malta Government. It was estimated that to send the men back to India would have cost the exchequer six thousand pounds and Sir Joseph Chamberlain, who was then the Secretary of State for the Colonies, warned the Governor that the stand taken by the Malta Government could be attended by serious repercussions as it tended to hamper the coaling trade of the Island. As at the time Malta was one of the main coaling stations of the Mediterranean and derived much of its prosperity from this source, the government had no option but to abandon its stand and to consent to receive the troops at Fort Manoel.[66] The Island's health suffered no harm.

---

[61] *Report from the Select Committee Appointed to Consider the Validity of the Doctrine of Contagion in the Plague*, London, 1819, p. 54.

[62] Hennen, J., *op. cit.*, pp. 522 and 533.

[63] Davy, J., *Notes and Observations on the Ionian Islands and Malta*, London, 1842, vol. ii, p. 45.

[64] Micallef, R., *Origin and Progress of the Charitable Institutions*, Malta, 1901, p. 24.

[65] Darmanin Demajo Documents.

Plague occurred years later towards the end of the 1914–18 war. A labourer employed at the dockyard and living at Kalkara suddenly felt ill on the 3rd March 1917 and died the following day. As no doctor had been called in to see him, his body was taken to the Floriana mortuary for the usual post-mortem examination. Signs indicative of a severe septicaemic infection together with bleeding in the renal pelvis and purpuric spots in the skin were found but no suspicion of plague was aroused. The appearance of fresh cases some days later from the same street, however, left no doubt that the man had died from septicaemic plague. In fact the clinical diagnosis of these cases was confirmed by bacteriological investigation and the examination of rats.

It was ascertained that a few days before the labourer fell ill, some dead rats had been found in the shop at the dockyard where he worked. These rats were removed by the workmen, the deceased very probably being one of them. It also transpired that while opening some cases of machinery that had come from Mesopotamia, where plague was epidemic, he found two sickly looking rats one of which he succeeded in catching and killing with his own hands. The neighbourhood of his residence at Kalkara was not found to be in any way rat-infested and all the evidence collected by the Public Health Department was against the possibility that the infection had originated at Kalkara or through any general infection existing among the rat population of the Island. Indeed all circumstances pointed to the conclusion that plague had been contracted from the infected rats imported into the dockyard and that the illness was propagated thence by the deceased to his friends and those who came in contact with him.

---

[66] Borg, T., *op. cit.*, p. 27.

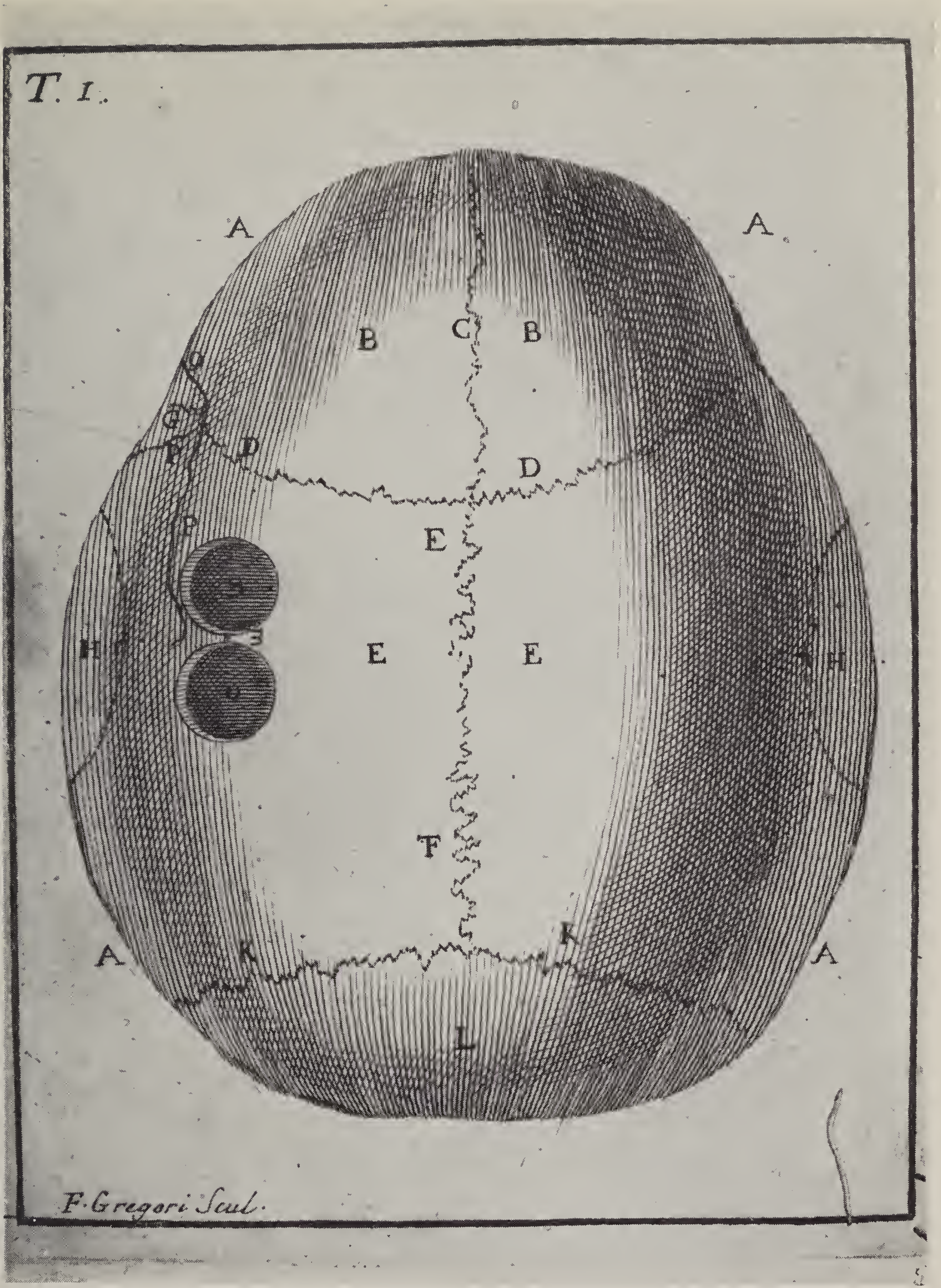


Plate IX

Vault of skull showing two trephine openings with the line of fracture near them.

From M. A. Grima's 'Della medicina traumatica altrimenti detta vulneraria', Firenze, 1773, Plate 1

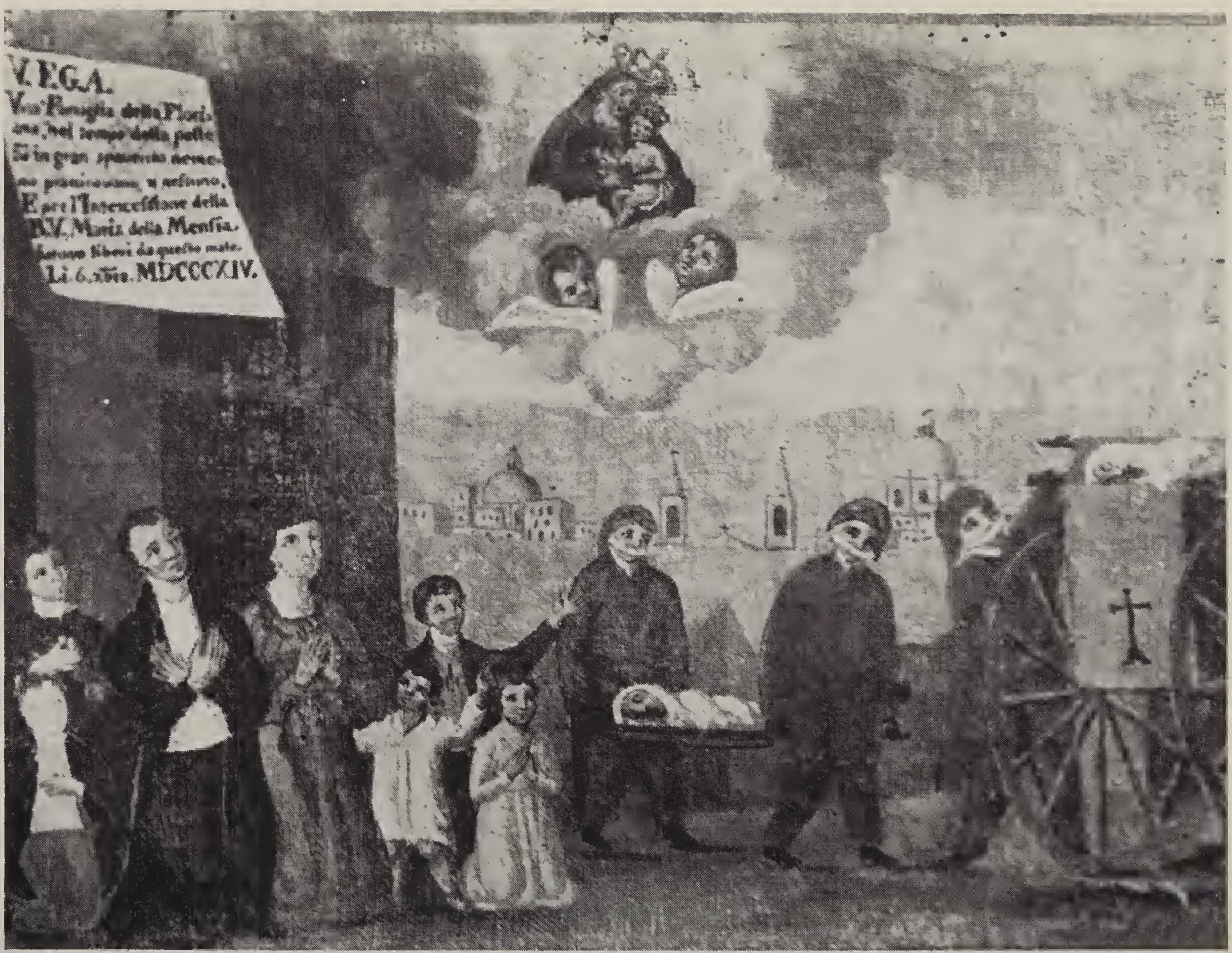

V.F.G.A.
E per l'Intercessione della
B.V. Maria della Mensia.
Li 6. xbre. MDCCCXIV.

Plate X

Plague of 1813. Transport of corpses by men wearing a band over their mouths and nostrils. An 'ex voto' painted in 1814 and preserved in the troglodyte church of the Blessed Virgin Mary at Minsija, Malta.

By courtesy of Mr. Ant. Debono the procurator of the church

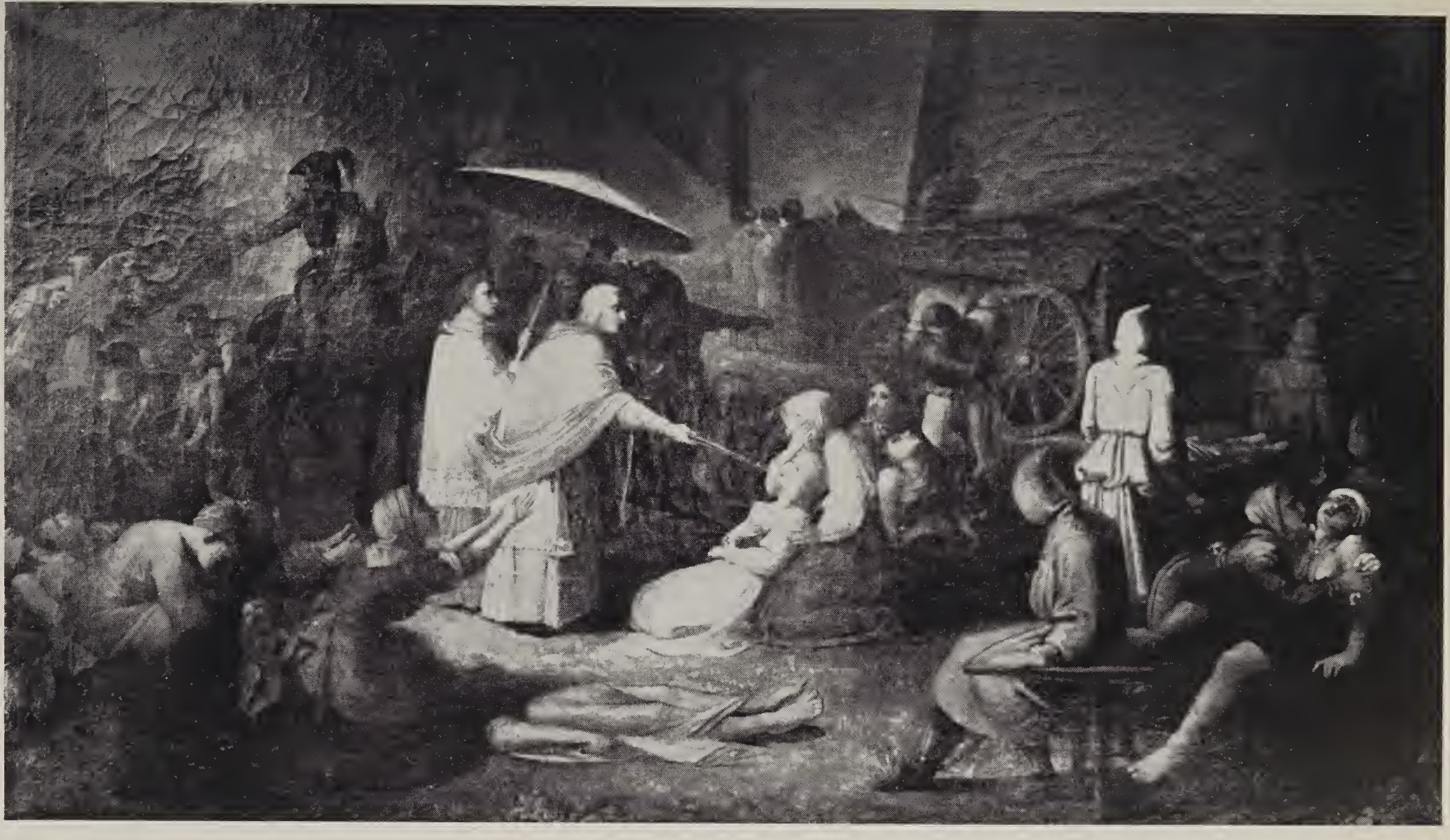


Plate XI

The plague of 1813 in a painting by P. P. Caruana. The priest in the centre of the picture is administering Holy Communion by means of a long handled spoon to avoid touching the patient.

By courtesy of the Director of the National Museum, Valletta

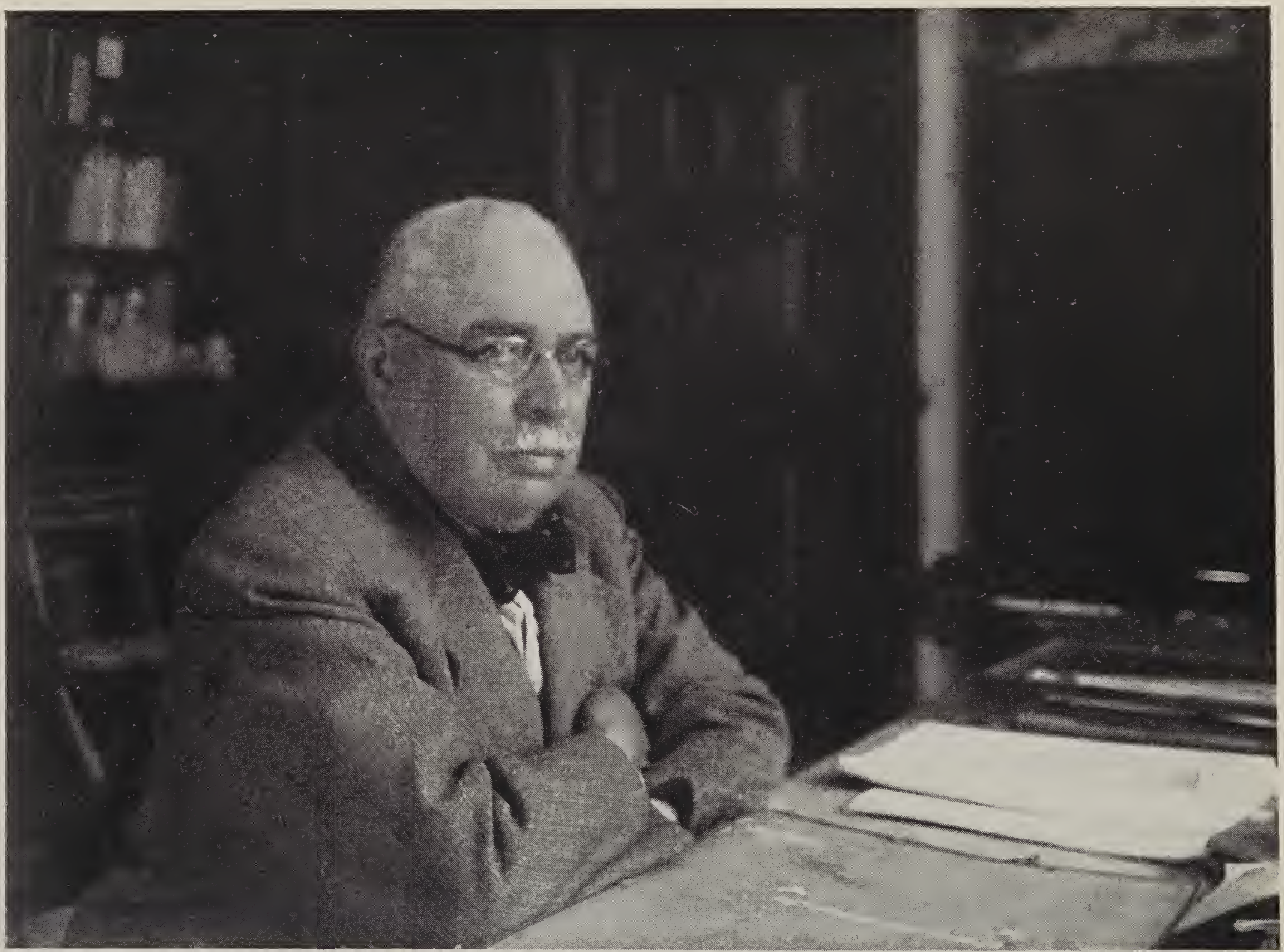


Plate XII

Prof. Sir Themistocles Zammit, Kt., C.M.G., M.D., D.Litt (Oxon.) (1864–1935). He discovered the germ of undulant fever in the goat's blood in 1905.

By courtesy of Capt. C. Zammit, F.S.A., Ta Xbiex

In contrast to previous plague epidemics the sanitary control of the 1917 outbreak presented no special difficulties once a correct diagnosis was made in time. It was known since 1894 that the disease was caused by the plague bacillus and that the infection in man was associated with the same disease in the rat, while in 1897 it had been shown that the rat flea was the main intermediary between rodents and man. Armed with this knowledge, the Public Health Department carried out immediate measures to stamp out the disease. The sick were isolated; a thorough search for contacts was made and the persons traced were detained in the lazaretto for fifteen days; the infected houses were disinfected, dockyard employees who absented from work were reported daily to the health authorities and the reason for their absence inquired into. Houses were rendered rat-proof and attention was paid to the sites likely to harbour rats and mice.

The mortality among rats was watched and an attack was launched on the rodent population of the Island by poisoning and trapping. For the first time observations on the natural history of the rat in Malta were made by Prof. Themistocles Zammit in conjunction with Major W. Broughton Alcock, R.A.M.C. In three months these two workers examined over one thousand five hundred rats of which fifteen were found to be plague-infected. All these animals, except a few, came from the vicinity of the Grand Harbour. It was shown that the brown-grey sewer rat (*Mus norvegicus* or *decumanus*), which was the older inhabitant of the Island, was being ousted from the sea-shore and driven inland by the more recently imported foreign rival, the jet-black *Mus rattus* and its varieties. The latter, however, had not succeeded in penetrating beyond the waterside and the *Mus norvegicus* remained the predominant species. The rat-flea usually connected with plague, *Xenopsylla cheopis*, was found on both the *Mus norvegicus* and the *Mus rattus*, the former being its more common host.[67]

The outbreak was limited to eight cases, four of which proved fatal. These included the post-mortem attendant, who infected himself from the cadaver during the autopsy on the first case, and a stretcher bearer from the Central Hospital who had helped to carry the corpse to the mortuary.[68]

THE PLAGUE OF 1936–37

Two years after the 1917 epidemic, three infected ships reached the Island. The troops on board were landed and isolated in Manoel Islet. Several fatal cases of plague occurred among these soldiers and the crew but the civilian population was spared.

The next outbreak of bubonic plague began during the first fortnight of April 1936. It started at Qormi in a baker's family—the baker, his son and father-in-law being the first to sicken. Bacteriological investigation confirmed the existence of plague both in these cases and in the rodents that were found in the vicinity of the stricken household. There was evidence that the infection was introduced into Malta from North Africa where rodent plague was known to be endemic. The infected rats and fleas were probably conveyed to the island in compressed bales of hay and straw that had been imported some time previously from North African localities; in fact, in many instances, the cases of plague occurred in persons who worked in stables and goat-pens where this hay was being used.

---

[67] Zammit, T., 'Rats and Parasites in Plague Epidemics', *Archivum Melitense*, 1918, iii. 141.

[68] Bernard, A. V., *Report on the Epidemiological Investigation of Certain Cases of Plague that Occurred in Malta During March 1917*, Malta, 1917. *Report on the Health Conditions of the Maltese Islands During 1916–17*, Malta, 1917, p. iv.

At first the disease limited itself to Qormi but at the end of May it reached the nearby village of Zebbug probably through the migration of infected rats. Only eleven cases, with three deaths, were reported between May and November when the Zebbug outbreak came to an end. Some time later, however, a few other cases cropped up in various scattered areas—Rabat, Marsa, Mosta and Attard. All the persons attacked were engaged in the scavenging trade or worked in stables and goat-pens.

Although at one time it gave cause for considerable anxiety, the epidemic remained a small one. The total number of confirmed cases amounted to only thirty-three with twelve deaths out of an estimated population of over two hundred and sixty-three thousand; but it lingered on for thirteen months with sporadic cases cropping up at irregular intervals of time until it died out in May 1937. The consequences of this outbreak were not at all noxious for it served to focus attention on two very important needs of public hygiene—the systematic destruction of rats throughout the two Islands and the institution of an efficient service for the collection of refuse from the streets and houses and its safe disposal. Numerous rubbish heaps for composting into manure were kept in all parts of the countryside giving harbourage to large numbers of rodents.[69] An anti-rat campaign was started at the end of November of the same year while a system for the collection and disposal of refuse was organised in September 1937.[70]

THE PLAGUE OF 1945–46

The measures just referred to resulted in a general cleaning up of the Island but with the outbreak of World War II conditions were again created that favoured the invasion of the Island by infected rats and the propagation of the native rat population. War material had to be brought into the Island by ships and landing craft so that the risk of rats arriving with service stores could not be eliminated.

---

[69] Bernard, A. V., 'Report on Plague in Malta in 1936', *Malta Government Gazette Supplement*, 3rd August 1937, p. 995.

[70] *Report on the Health Conditions of the Maltese Islands for the Year 1936*, Malta, 1937. *Report on the Health Conditions of the Maltese Islands for the Year 1937*, Malta, 1938.

The widespread destruction of buildings round the harbour area with the resulting accumulation of debris over a wide extent provided undisturbed harbourage and breeding grounds to rodents on a large scale. To make matters worse it was discovered that some of the red squill with which the public health authorities had been supplied was inactive while for two short periods during the siege neither red squill nor barium carbonate were available. To these circumstances must be added the fact that at the beginning of 1945 plague had appeared in several parts of North Africa and the Middle East such as Algiers, Oran, Haifa and the Suez Canal. From these places it spread to Rhodes, Taranto and Palermo. Its appearance in Malta was inevitable; indeed the possibility of a plague epizootic being communicated to the local rodent population by imported infected rats from the above mentioned ports was not unexpected. Although it is not possible to state with certainty how the infection was carried into the Island, circumstances make it probable that infected rats came ashore from landing craft which used to beach in the Msida and Peità Creeks to discharge and load stores and war material.

Human cases of plague made their appearance from the 18th June 1945 onwards. The first two cases were sent to the Isolation Hospital with a diagnosis of cerebrospinal meningitis but bacteriological examination soon left no doubt that these two patients were suffering from plague. By the end of the month cases cropped up in different scattered localities, a form of propagation that indicated that the rat epizootic was advancing inland from the waterside. In fact, later on, the disease penetrated still further into the countryside and invaded fresh villages. The outbreak dragged on over a period of twelve months, the last case being reported on the 11th June 1946. The total number of persons attacked was eighty of whom twenty-two succumbed to the disease. All cases were of a bubonic type except one which was of the septicaemic variety.[71]

During this epidemic, apart from the orthodox measures of rat destruction, a new system of rodent control that had been adapted in war-time Britain was introduced in Malta on the recommendation of the Scientific Adviser on Pest Control of the Ministry of Food. The method consisted in a survey of defined areas, pre-baiting for a number of days with plain baits and finally laying poisoned baits. This measure proved very successful resulting in a considerable decrease of the rat population. The anti-rat campaign has never been abandoned. Educational aids, such as instructional talks and the showing of films on rat extermination, are utilised to secure the co-operation of the public, especially the farming community.[72]

---

[71] Briffa, A. C., 'Report on the Outbreak of Plague 1945–46', *Malta Government Gazette Supplement*, 29th April 1948, p. 1571. Morana, J., *The Plague Outbreak at Bubaqra*, Malta, no date.

[72] *Report on the Health Conditions of the Maltese Islands for the Year 1945*, Malta, 1948. See also subsequent Reports up to 1951.

CHAPTER 19

Cholera Epidemics

THERE is no certain evidence of outbreaks of cholera in the Maltese Islands earlier than the nineteenth century. In his 'De Morbis Abdominis' written in 1745 the Maltese physician Dr. Giuseppe Demarco deals with this disorder in a chapter entitled 'De Cholera Morbo' but he gives no information with regard to its epidemiology.[1] Mention is also made in his writings of gastrointestinal disorders presenting 'choleraic symptoms' with prostration; these affections were observed in August 1767, October 1770 and August 1783.[2]

THE CHOLERA OF 1837

Cholera assumed epidemic proportions in India in 1816. Three years later it invaded China and in 1821 it advanced westwards into Persia following, in subsequent years, the course of the River Volga into Russia. Thence it reached Vienna and Berlin in 1831, London in 1832 and Spain in 1833. The fear of cholera gripped Malta in 1834 when the disease broke out in Gibraltar. As Malta was in many ways similarly circumstanced to Gibraltar, the government thought it wise to give wide publicity to a series of regulations and recommendations that had been issued to the inhabitants of the Rock by its Principal Medical Officer. The aim of the government was to 'tranquillise the minds of the people of all classes' and to familiarise them, while the disease was still at a distance, with those measures that were being adopted against it in other places.[3]

The commonly accepted view was that cholera first broke out in the Island on the 9th June 1837 at the Ospizio of Floriana, where several hundreds of old and invalid people were looked after; however, there is some evidence that sporadic cases had already made their appearance as early as September 1836 at Mdina.[4] Similar cases were said to have been observed among British troops every year during the decade 1828–1837.[5]

---

[1] Manuscript 36, no pagination, Royal Malta Library.

[2] *Storia della Società Medica d'Incoraggiamento*, Malta, 1845, p. 255.

[3] *Malta Government Gazette*, 27th August and 8th October 1834.

[4] Chetcuti, T., *Notizie storiche e patologiche-cliniche sul cholera che divampò in Malta e Gozo nell'estate del 1837*, Malta, 1838, p. 3.

[5] Pisani, S. L., *Report on the Cholera Epidemic in the Year 1887*, Malta, 1888, p. 19.

There is no doubt that the disease occurred on a large scale only in 1837. On the 9th June of that year Dr. S. Axisa of the Ospizio diagnosed the malady in two inmates who fell ill with vomiting and diarrhoea at about midnight. He informed the health authorities immediately and the Police Physician, Dr. L. Gravagna, was sent thither by His Excellency the Governor to examine and report on the two patients. The diagnosis of cholera was confirmed by Dr. Gravagna and by another physician who also visited the Ospizio. The cases were next seen by the Inspector General of the Military Hospitals and another British physician both of whom declared that the disease was not cholera. Other inmates, however, fell ill with the same manifestations the following day and the Inspector General, faced with this fresh evidence, admitted that the illness was a mild type of cholera; however, he excluded 'asiatic' cholera. This reluctance to call the disease by its true name reflected itself in the official notices that from the 14th June 1837 appeared in the Government Gazette; thus while the first government announcement spoke of the disease as 'cholera', in subsequent notifications it was referred to as 'the illness having all the symptoms of cholera', the disease 'resembling cholera' and a 'partial epidemic'.[6]

The epidemic began to advance. By the 13th June twenty-seven inmates had been attacked with seventeen fatalities. There was no doubt by now among Maltese and British doctors that they were dealing with 'asiatic cholera' though its origin was attributed to environmental causes. Acting on this assumption the Governor ordered the removal of six hundred and forty-five out of the seven hundred and fifty inmates and mental patients of both sexes from the Ospizio to Fort Ricasoli in the hope of arresting the progress of the malady in the 'isolated and well aerated' position occupied by the Fort.

The transfer of the inmates took place on the 13th and 14th June but far from ceasing the epidemic continued to spread with unabated vigour both among the inmates who had been removed to Ricasoli and among those that had been left at the Ospizio. In fact the incidence of cholera among the inmates of Ricasoli assumed such proportions that the medical staff became incapable of dealing with the ever increasing number of cases. The doctors were discouraged. To make matters worse they, too, contracted the disease and two of them had to leave the Fort and go home to be nursed there. Soon it became impossible to keep order at Ricasoli. Some of the nurses declined to serve any longer and abandoned the Fort; those who remained at their posts caught the disease and died in the following few days. Corpses remained unburied owing to the insubordination of the servants. To provide the necessary personnel eighteen convicts were discharged from prison on the 18th June and were entrusted with the transportation and burying of the corpses but they committed so many excesses that they had to be readmitted to prison the next day.

---

[6] *Malta Government Gazette*, 14th, 21st and 28th June 1837.

Another nine convicts were liberated but they, too, turned out to be as unreliable and troublesome as the previous group. Meanwhile the patients, including the stricken members of the medical and lay staff, were left to languish without any comfort except the administration of water and some calomel powder.

An attempt was made to reorganise the hospital on the 21st June when its administration was entrusted to Dr. Anthony Speranza. Under his able direction order was immediately restored, the necessary medical and nursing staffs were provided and the convicts were persuaded to inter forty-five corpses that had been left unburied, so that when the Governor visited the Fort a few days later he declared himself satisfied with the measures taken for the proper treatment and spiritual assistance tendered to the patients. By this time two hundred and fifty-seven inmates had succumbed to the disease. It was decided to allow as many healthy inmates as were willing to return to their families. Many of them availed themselves of this offer immediately so that eighty-three of them left the Fort on that same day. This policy was severely criticised by the 'contagionists'. Their argument that the exodus of so many individuals exposed to the disease helped to foster its dissemination among the general population is hard to refute; but it is also undeniable that had these inmates been forced to remain under the unsatisfactory conditions prevailing at the Fort they would have been condemned to almost certain death. It is significant that as a result of this depopulation of Ricasoli the incidence of the disease began to diminish. It has been estimated that five hundred and thirty-seven inmates contracted the illness and that four hundred and forty-two of them died. These were buried in a plot of ground where now stands the Wied Ghammieq Cemetery not far from Fort Ricasoli.

In the meantime, the epidemic had reached various districts such as Floriana, Senglea, Birkirkara and the military and naval hospitals. The people were terrified.[7] In their consternation they tried to abandon the towns while others shut themselves up in their homes to avoid contact with others and thus escape the disease. An eyewitness of these scenes, Mrs. Sarah Austin, wrote: 'I have seen mothers refuse to go near their children, husbands their wives. I have seen one of eight brothers (in the upper classes) not one of whom would approach their father's death-bed. In short every variety of atrocious selfishness. . . . As to cure, it is anything, everything, nothing. Nobody knows. Everything succeeds—everything fails.'[8] The fear that seized the population at the outbreak of the epidemic spread also to a few members of the medical profession. This circumstance gave rise to the allegation that doctors refused to tend cholera-stricken patients; that this accusation was unfounded is proved by the fact that almost all the medical men of the Island offered their services at the government's call of the 20th June. Indeed the number of applicants surpassed the number needed at the moment. The naval and military doctors, too, responded unhesitatingly to the government's call for help.[9]

---

[7] Stilon, G. M., *Sul cholera morbus*, Malta, 1839, p. 5.

[8] Ross, J., *Memoirs and Correspondence of Mrs. John Taylor, Mrs. Sarah Austin and Lady Duff Gordon*, London, 1888, vol. i, p. 115.

To cope with the number of cases from the affected areas, temporary hospitals were established in Valletta, Floriana, Senglea, Mdina, Zejtun, Zebbug, Hamrun, Qormi and Zurrieq. Where sufficient space was available the patients were separated into acute wards and convalescent wards according to the stage of the illness. Stress was laid on the cleanliness of the wards and bed linen, the proper ventilation of the building and its fumigation with various aromatic substances. Choleraic patients were encouraged to resort to hospital immediately the illness became manifest but the people were reluctant, at first, to avail themselves of the hospital facilities offered by the government as the rumour had gained ground that the government's aim in encouraging hospitalisation was to put the patients to death by poisoning. The consequence was that it was only when the patient's condition had deteriorated to such an extent as to preclude all hope of recovery that his relatives consented to have him admitted to hospital. The result was that many reached hospital in a moribund state while some of them died on the way.[10] Those destitute patients who insisted on remaining at home were granted free medicines and medical attendance besides financial relief.

As elsewhere, there were two opposite currents of opinion in Malta regarding the mode of transmission of cholera and the question was hotly debated as to whether the disease was contagious or not. The non-contagionists, supported by the authority of British, French and German clinicians, maintained that cholera was not communicable by contact with infected patients or their clothing—not even the bed linen soaked with their faeces—and that, therefore, its progress could not be checked by any quarantine or restrictive measures. On the other hand they held that cholera was an 'epidemic' illness, i.e. transmitted by means of the atmosphere, its germ being carried from place to place and from patient to patient by means of vitiated air pregnant with the 'miasmas and emanations' of cholera. Invasion of the human organism, according to this view, took place by inhalation of choleraic miasma especially where many individuals were crowded in small and ill-ventilated habitations.

The contagionist school, upheld especially by the Italians, insisted that cholera was propagated by contact with patients and their fomites, a view that made little headway at that time. The grounds adduced by the government for rejecting the contagionist theory and for adhering to the 'epidemic' one were, among others, that the usual sanitary restrictions were of no avail against the propagation of cholera; the contemporaneous appearance of the malady in Palermo and in Malta when no communication existed between them was taken as an indication that the germ of the illness was in the atmosphere; the simultaneous prevalence of the disease in such distant towns as London and Paris was considered as a proof of its non-contagiousness; nurses, doctors and spiritual assistants were stated to have escaped the infection more often than those who avoided all contact with choleraic patients.[11] In support of such views and of the non-contagiousness of cholera, the Central Committee for Supervising Cases of Cholera issued a series of declarations over the names of renowned French physicians and surgeons, among them Magendie and Dupuytren, to the effect that cholera was non-contagious.[12] The government was so convinced of the correctness of these views that it took a very intolerant attitude towards those who ventured to dissent with them and who dared to maintain that cholera was a contagious illness. In fact a Government Notice of the 21st June 1837 did not hesitate to condemn all those who persisted in upholding 'the cruel and unfounded doctrine' of the contagiousness of the disease, and to intimidate the dissenters into silence with the following threat: 'The persistence, therefore, in such conduct, on the part of those in the employment of Government will immediately draw upon them the highest displeasure of His Excellency; and will operate as a disqualification for those who may hereafter become candidates for public situations.' To-day one shudders at the irresponsible familiarity fostered by this attitude towards such a fatal illness. 'The attendants', wrote a medical man, 'carried the patients' clothing in their arms with indifference and after depositing it in a place covered with planks used to rest and even to sleep on these clothes when they were off duty. The assistant physicians and surgeons fearlessly bled the patients who required phlebotomy and, not infrequently, I myself bled the patient from his other arm when I saw that the blood was issuing out with difficulty. Caesarean section, after the mother's death, was always carried out. I also never failed to give my help to those choleraic women who aborted. . . . Many necropsies were performed during one of which, that lasted over three hours, the young assistant in opening the small intestine, which was full of a whitish poultacious material, wounded himself in the finger; but not the least symptom of 'contagious' cholera appeared either in him or in those of us who assisted at the post-mortem. Similar experiences . . . occurred at the military and naval hospitals as has happened also in so many other countries'.[13]

---

[9] *L'Ape Melitense*, 1838, i. 11 and 22.

[10] Stilon, G. M., *op. cit.*, p. 9.

On the 19th June 1837 a Central Committee for the Superintendence of Cases of Cholera, composed of the Police Physician, service doctors and a number of prominent Maltese citizens, was appointed to advise the government on the steps to be taken to arrest the spread of the epidemic. On the recommendations of this committee, hospitals were set up and the members of the profession and medical students were invited to visit the hospitals established in Christopher Street, Valletta, and in the Convent of St. Philip Neri at Senglea to make themselves familiar with the manifestations of the disease.[14] Local committees, formed of the Deputy Lieutenant, the parish priest, the senior physician and a few laymen, were nominated in every village. These committees had to see that streets, yards and cellars were cleared of dirt and rubbish; to visit houses to ascertain that these were kept clean and well ventilated and that no cases of cholera were being concealed. They also provided medical assistance to all who needed it.[15] White-washing of the dwellings of the poor and the disinfection of houses by fumigating them with manganese peroxide and sulphuric acid were taken in hand.

---

[11] Anonymous, *Il cholera in Malta nel 1837*, Malta, 1838.

[12] Manuscript 1271, Notice dated 24th June 1837, Royal Malta Library.

[13] Stilon, G. M., *op. cit.*, p. 6.

While the Russian armies were blamed for introducing cholera from the East into Europe, it was generally admitted that the primary agent of the disease was unknown. The most commonly accepted theory ascribed its appearance to a combination of causes. The predisposing factors were believed to be humidity and cold, dietetic errors and emotional disturbances[16] such as sorrow and the fear of cholera itself. The exciting cause was —as already mentioned—the 'choleraic miasma' which originated in the delta of the River Ganges. Insects and 'microscopic animalcules' were also suggested as causes but this idea attracted little attention at the time. Once it invaded the body the 'miasma' reached the nervous system where it produced an irritative lesion in the spinal cord and sympathetic ganglia radiating thence to the digestive system and the heart. This was the pathogenesis of cholera envisaged in 1837.

While these speculations formed the subject of endless discussions, the disease was causing havoc in the Island. The epidemic reached its peak in July when 6,286 cases were known to have occurred with 2,743 deaths. On the 6th of the month the disease reached Gozo where five hundred and ten cases with one hundred and eighty-three fatalities were registered by the end of the month. The poorer districts, where housing conditions were bad, were most severely hit. This is how Dr. Thomas Chetcuti graphically describes the last moments of his patients. In their restlessness 'the women, casting aside every sense of shame, uncover themselves a thousand times and, in silence stagger away from their beds and anxiously crawl and roll about on the pavement in search of coolness and relief from the intolerable burning sensations inside them. . . . Their stools were not foetid but of an acrid, yeasty odour resembling the spermatic smell of the flowers of the carob tree which impregnated the air inside the wards and which could also be felt at some distance from the hospitals. . . . A few patients had tetanic convulsions, others complained of a burning pain in the epigastrium while many, in a setting of clear consciousness, remained completely immobile, indifferent and apathetic and, with a fixed stare from their half-closed eyes, placidly gave up their last breath.'[17]

---

[14] Government Notice of 4th July 1837, *Malta Government Gazette*, 5th July 1837, p. 240.

[15] Government Notice of 22nd June 1837, *Malta Government Gazette*, 28th June 1832, p. 235.

[16] Gravagna, L., *Ragguaglio sul cholera morbus*, Malta, 1837, p. 5.

[17] Chetcuti, T., *op. cit.*, p. 22.

The principle underlying the treatment of cholera was the elimination of the 'choleraic miasma' and the means employed by doctors were all directed to this end. Blood-letting and diaphoretics were resorted to in cases where the miasma was believed to have entered the body through the lungs in the hope that the 'atoms' of cholera circulating in the blood would be eliminated in the shed blood and sweat. Such was the reliance placed on phlebotomy that nurses submitted themselves to it quite willingly to acquire immunity from the disease. Vesicants along the whole length of the spine and hot baths were prescribed in cases where exposure to cold was thought to be a predisposing cause. Cold baths were preferred by others in the hope that by this means the heat concentrated in the internal organs would be attracted towards the surface of the body.[18] Vomiting and diarrhoea were counteracted by the oral administration of iced water and the application of leeches to the epigastrium or around the anus. An intravenous injection of a mixture of sodium bicarbonate and sodium muriate was advocated to replace the loss of fluid and salts. It is known that this form of treatment was used at the naval hospital on at least two patients, one of whom survived. Others recommended a mixture more in keeping with the chemical composition of the blood. Dr. Giuseppe Stilon, who was convinced that the seat of the lesion was in the intestines, administered calomel in very high doses—twenty grains every half an hour being a common prescription.

The severity of the epidemic started to wane in August and still more notably in September. By the 11th October it had ceased completely and a clean bill of health was issued by the Quarantine Office. A total of 8,785 cases are known to have occurred in Malta and Gozo between the 9th June and the 10th October 1837 of whom 4,252 lost their lives. The population of the two islands was then 120,000 so that about one in every thirteen persons had been attacked.[19] More women were affected than men. It has been said that all the pregnant women who contracted the disease died and that in no instance did the baby, delivered immediately after the mother's death by Caesarean section, survive.[20] No age was spared but it was noted that children were less frequently and less severely attacked than adults. Five medical practitioners were among the victims of the outbreak.[21]

In the hospitals the mortality rate varied from place to place, that is between 14 per cent and 67 per cent. The lowest rates were recorded by the military and naval hospitals. This was attributed to the lesser number of cases treated in these hospitals, the earlier institution of treatment among service people and the better hygienic surroundings of the patients.[22]

---

[18] Stilon, G. M., *op. cit.*, p. 50.

[19] *L'Ape Melitense*, 1838, i. 24.

[20] *Ibid.*, p. 20.

[21] Pisani, S. L., *op. cit.*, p. 9.

[22] *L'Ape Melitense*, 1838, i. 17 and 18.

THE CHOLERA OF 1848

'The awful visitation of cholera' again menaced Malta in 1847, when cases were reported from a few Mediterranean ports in November. Appeals were made for the strengthening of quarantine measures and one newspaper even advocated restrictions on the flights of pigeons which fed on board the grain lighters that were in quarantine![23] The infection did not, however, enter the Island but in the following year between September and November a mysterious illness having several of the clinical manifestations of cholera broke out. A great part of the population was affected but there were only twenty-two severe cases of whom only six recovered thus bringing the mortality to 72 per cent. The 'Società Medica d'Incoraggiamento' (The Medical Society of Encouragement) appointed a committee composed of seven physicians to study and report upon the nature of the illness. Having completed their investigations, which comprised both clinical and post-mortem examinations, they declared that the illness was not cholera in spite of the fact that in some of the cases studied it had presented choleraic features. They were of opinion that the malady was an 'influenza or epidemic constitution' which caused gastro-intestinal disturbances with diarrhoea and which in a few instances assumed a 'choleraic and typhoid' form. Its spread was attributed to the diffusion of 'miasma' although they themselves adduced sufficient evidence in their report to show that the illness was propagated from sick individuals to healthy persons.[24] These conclusions, however, did not meet with general acceptance and some dissident voices were heard who maintained that the disease was really cholera. The records of the 'Società' of this period make references to the existence of two successive epidemics in the autumn of 1848 but unanimity was not even reached on this point, some of the members of the profession contending that what appeared to be two distinct illnesses were actually two different stages of the same epidemic.[25] The Chief Police Physician, writing many years later, entertained no doubt that the disease was cholera. He showed how it had manifested itself among the soldiers quartered in Fort St. Elmo, the cases occurring among the civilian population being mainly in laundresses and other persons who had had communication with the sick troops. For this reason the outbreak became known as the 'soldiers' disease'.[26]

THE CHOLERA OF 1850

Cholera broke out in the Regency of Tunis in February 1850. Because of the commercial relations and frequent communications between Malta and that country, fears arose that the disease would eventually invade the Island. In fact it reached Malta a few months later, the first known case being that of a Maltese seafarer who had arrived in the Island from Sousa on the 5th June. He fell ill with cholera on the 9th and died the following day.

---

[23] *The Malta Times*, 23rd November 1847, p. 4.

[24] *Rapporto sulla malattia sviluppata in Malta nel fine dell'estate e nell'autunno del 1848*, Malta, 1849.

[25] *Storia della Società Medica d'Incoraggiamento*, Malta, 1845, p. 257. *Il Barth*, 14th October 1847, p. 463.

[26] Ghio, A., *The Cholera in Malta and Gozo in the Year 1865*, Malta, 1867, pp. 16 and 27. Pisani, S. L., *op. cit.*, p. 9. Segond, G., *Storia ta Malta u Ghaudex*, Malta, 1930, vol. v, p. 396.

The disease did not spread uniformly but manifested itself in partial epidemics at different spots each taking a course of its own.[27] It reached Gozo on the 28th August. Contrary to what happened in 1848 no one had any doubts as to the nature of the malady for it presented all the signs and symptoms that the epidemic of 1837 had rendered so familiar to the profession.

Considerable light was shed on its mode of propagation by a committee appointed by the 'Società Medica d'Incoraggiamento' to study the features of the outbreak. The evidence collected by them showed clearly that the disease was a contagious one and they felt no hesitation in declaring that it was 'a manifest absurdity to deny the contagiousness of cholera'. Although the real manner of spread of the disease came to be recognised by the profession, the 'epidemic' or 'miasmatic' theory of transmission was not abandoned completely. Indeed the members of the committee itself cautiously recorded the warning that 'the existence of cholera in the country . . . could generate an epidemic constitution . . . and give rise to a desolating epidemic'. This line of thinking was also behind some of the preventive measures advocated by them against the progress of cholera such as the proper ventilation of streets and houses and the avoidance of humid surroundings. Still this committee must be credited with the establishment of certain principles that have stood the test of time and that are worth enumerating because they form an important milestone in the advance of epidemiological thought in Malta. It was observed that: (a) the infectiousness of cholera is, generally speaking, not so intense as in other contagious illnesses such as smallpox and measles; (b) an individual predisposition is necessary for the development of the disease; (c) the spread of cholera from one area to another varies directly with the degree of contact between their inhabitants; (d) the incubation period does not exceed twenty-five days; (e) the disinfection of clothing and houses is never to be neglected; (f) corpses must be buried as soon as practicable and as far away as possible from inhabited areas; (g) the water for drinking and for culinary purposes must be selected with the utmost care.[28]

The number of cholera cases reported to the authorities between the 9th June and the end of the epidemic on the 13th October was 4,029 and that of deaths 1,736 among whom were three physicians.[29] Soup kitchens were organised by public spirited citizens to feed the indigent; in Valletta alone over one thousand rations of soup were distributed in a single day.[30] Medicines were also provided gratis to the poor.

---

[27] Pisani, S. L., *op. cit.*, p. 10.

[28] *Rapporto sulla malattia sviluppata in Malta nella fine della primavera e nell'estate del 1850*, Malta, 1850.

[29] Pisani, S. L., *op. cit.*, p. 10.

A physician from the village of Zejtun pretended to cure the disease by means of a secret remedy which he sold at a substantial profit. It contained mint and pennyroyal but he never divulged what the 'secret' ingredient was, not even when he was invited by the Governor to disclose it. When he was asked to state the reward which he expected he said that he expected nothing less than a sum of money equivalent to the cost of the largest ship in the British navy! He was branded as an impostor.[31] A foreign doctor also claimed to possess a remedy for cholera and he sent a 'box of cholera medicine' from London but the hospital medical staff declined to use it as its composition was not made known to them.[32]

THE CHOLERA OF 1854 AND 1856

An outbreak, on a small scale, started on the 1st July when the infection was imported from Marseilles by the French troopship *Egyptus*. The number of persons who succumbed to the disease in Malta and Gozo, before its extinction in September, was three hundred and forty-eight.[33] Another small wave of cholera, involving the death of fifty persons, occurred in both Islands from July to November 1856.[34]

THE CHOLERA OF 1865

This epidemic started at Mecca in May 1865 among the many thousands of pilgrims who had assembled there for their traditional religious devotions. Thence it travelled to Alexandria from where on the 14th June the British Consul belatedly informed the Malta Government that cholera had broken out in that town where actually the first case of the disease had appeared as early as the 2nd June. The consequence of this delay in the receipt of the news from the British Consul was that all arrivals from Alexandria before the 14th June, many of them pilgrims from Mecca, were admitted to pratique and many of them went ashore. After this date, however, all vessels from Alexandria were subjected to quarantine the passengers being accommodated at the Lazaretto. This measure was taken too late for the germ of cholera had already gained a foothold on the Island.[35]

The panic that had overtaken the population in 1837 again seized all sections of the community at the announcement of the presence of cholera in 1865 but the public health authorities were not taken unawares.

---

[30] *L'Avvenire*, 20th July 1850, p. 266; 27th July 1850, p. 273; 10th August 1850, p. 291.

[31] Segond, G., *op. cit.*, p. 400. *L'Avvenire*, 17th August 1850, p. 299.

[32] Inspector's Letters to Government from 31st August 1850 to 13th October 1857, fol. 23, Medical & Health Archives, Valletta.

[33] Segond, G., *op. cit.*, p. 416. Ghio, A., *op. cit.*, p. 16.

[34] Segond, G., *op. cit.*, p. 428.

[35] Ghio, A., *op. cit.*

The possibility of the introduction of the disease had kept them on the look-out for any suspicious indications suggestive of its presence. A false alarm had caused them some anxiety in April of the same year when cases of an unusual fever were admitted to the Central Hospital. This fever—whatever its nature—was confined to the south-eastern portion of the Island, the villages of Zejtun and Safi suffering the greatest number of cases. The physicians of the Central Hospital, however, found no reason for the least apprehension about the character of the illness which they ascribed principally to the unhygienic conditions of the two villages and to 'the barbarous state of the dwellings and the disgustingly filthy habits of the individuals'.[36]

This time, however, there was no doubt that they had to deal with cholera. The first case appeared on the 20th June in the married quarters of the British troops stationed in the building known as the Plague Hospital lying at a distance of about two hundred and twenty yards from the eastern end of the Lazaretto. On the 1st July, by which time five cases had occurred among military personnel, the soldiers and their families were transferred partly to Floriana and partly to Pembroke Camp; others were sent to the Salvatore Counterguard where a few other cases subsequently cropped up. The earliest case among civilians appeared at Valletta on the 3rd July in a young woman who seemed to have had no connection with the military cases. From Valletta the disease crept to Floriana, Bormla and Msida, some of those attacked being arrivals from Alexandria who had been quarantined for twelve days at the Lazaretto. A new locality was visited almost daily but progress was so slow that the disease did not reach the remotest villages, such as Mellieha and Dingli, until nearly two months after its first appearance at the Plague Hospital. From the 16th July the number of cases and of deaths increased daily until the epidemic reached its peak on the 9th August when seventy-three attacks were reported.[37]

The poorer quarters of the cities presented a 'frightful misery'. To afford the necessary help to victims of the disease and to destitute persons a Relief Committee was formed on the 1st August 1865 to collect contributions. This committee distributed food and financial aid and provided wet-nurses to orphaned infants; it also facilitated the acquisition of the necessary medicines by poor people and tried to improve the sanitary state of their dwellings. Its members endeavoured to persuade the affected persons to go to hospital but finding that the prejudice against hospital treatment was insurmountable in many instances, they provided destitute patients with domiciliary nurses and medical attendance. The committee also succeeded in inducing the government to provide for the rapid removal of corpses from the houses and to prohibit the public celebration of 'festas' to prevent the occurrence of large congregations of people. Since the largest number of victims were in overcrowded habitations the committee suggested to the government the dispersal of people living in tenement houses and their temporary evacuation in the government schools. This suggestion was not adopted as it was thought unwise to risk infecting the school buildings.

---

[36] Letters to Government of 16th March 1865 to 3rd May 1867, Medical & Health Archives, Valletta.

[37] Ghio, A., *op. cit.* Sutherland, J., *Report on the Sanitary Condition of Malta and Gozo with Reference to the Epidemic Cholera in the Year 1865*, London, 1867, p. 19.

At Zejtun entire families were wiped out. To cope with the increasing number of casualties in this village an emergency hospital was set up on the 25th September in a house put at the disposal of the committee by a priest from Bormla and furnished with equipment provided by the Bishop and several business people.[38]

The infection was conveyed to Gozo by a seaman from Malta on the 21st July. In a few days the disease attacked his family, his neighbours and many of the inhabitants of Xewkija where he lived. From this locality it reached the other villages of that Island. Its advance was as slow as that of Malta, the last case manifesting itself on the 24th October. In Malta no more cases occurred after the 9th November.

The charitable institutions suffered relatively little from this outbreak, in contrast to what happened in 1850 when they were the first to bear the brunt of the disease. In 1865 only the Ospizio, with a population of seven hundred and fifty inmates, had some cases. As soon as the first one was reported the Ospizio was partly evacuated. Three hundred inmates were sent home while the remaining ones were dispersed in other public institutions. All traps of drain openings were treated with lime water three times a day and covered with pieces of canvas saturated with chloride of lime. In order to spot cases of the disease as early as possible, the water closets of all the charitable institutions were locked and employees were put in charge so that patients were obliged to notify these employees before they were able to make use of the lavatories. In this way those inmates who, because of diarrhoea, made repeated applications to go to the lavatory were immediately brought to the notice of the physician. The excretions of choleraic patients were treated with disinfectants and then thrown into the drains or buried. The number of inmates attacked was fifty-four of whom thirty died. Of the nursing personnel only one contracted the illness but he recovered. The mental hospital, where cholera had claimed numerous victims in 1850, did not have one single case while the Hospital for Incurables with a population of two hundred and fifty, also remained immune.[39] The population of Malta and Gozo in 1865 was estimated at nearly 134,000 souls. Those known to have become ill numbered 3,106 of whom more than half succumbed.[40]

The Chief Police Physician, Dr. A. Ghio, was convinced that cholera was a communicable disease transmitted, directly or indirectly, from one person to another. He opposed the 'miasmatic' theory of the propagation of cholera and adduced ample epidemiological evidence to contradict that view. He showed how in many instances the attack of one individual was closely followed by that of others inhabiting or frequenting the same house. Although he confessed that he was in the dark as to how cholera was brought into the Plague Hospital and that he was uncertain with regard to the means of conveyance of the infecting agent he held the view 'that excretions are the vehicles by which the choleraic virus, reproduced and multiplied in the body of a person, is eliminated from that person and passes either directly or indirectly to other individuals'.[41] He also envisaged the transmission of the disease by healthy carriers and by persons who, though complaining of some ordinary diarrhoea, never showed the usual signs and symptoms of cholera. To appreciate the significance of Dr. Ghio's views it must be borne in mind that he was expressing them twenty years before Koch announced his discovery of the causative organism of the disease.

---

[38] *Relazione generale del Comitato di Soccorso istituito in ajuto dei sofferenti dal colera, 1865*, Malta, 1866, p. 8.

[39] Miscellaneous Letters Issued from 7th January 1859 to 1st July 1867, fols. 395–399, Medical & Health Archives, Valletta.

[40] Sutherland, J., *op. cit.*, p. 6.

THE CHOLERA OF 1867

Like the previous epidemic this outbreak had its onset among the military personnel. It began in July and by the early days of September it spread to the civilian population. The troops had six hundred and thirty cases with one hundred and ninety deaths. Of the four hundred and three civilians attacked two hundred and fifty-nine died. Gozo remained free from the disease.[42]

THE CHOLERA OF 1887

While the Island was labouring under an epidemic of smallpox and of diphtheria in October 1871, cholera threatened to invade the country from both east and west. Precautionary measures were taken against its introduction into Malta, reliance being placed on rigorous and prolonged quarantine, cordoning and evacuation. These sanitary steps tended ultimately to isolate the Island completely from the outside world and as the population depended for its food supply on the surrounding countries the precautions taken amounted in practice to a self-imposed blockade. It was, therefore, difficult to decide on the best course to choose—freedom from cholera or death from famine.[43] These anxieties recurred every summer and autumn. In their efforts to obtain a relaxation of the quarantine measures imposed by the government the business community persisted in blaming the 'air columns' of Lawson and the 'soil emanations' of Pettenkofer as causes of cholera.[44]

---

[41] Ghio, A., *op. cit.*, p. 19.

[42] Pisani, S. L., *Report on the Cholera Epidemic of 1887*, Malta, 1888, p. 10. Segond, G., *op. cit.*, p. 465.

[43] *Il Barth*, 16th October 1871, p. 56.

Another alarm was raised in 1885 when cholera appeared in Palermo. Among other precautions the Maltese Government published a pamphlet in the vernacular on the measures to be taken by the public in case the disease broke out in the Island.[45] The traditional but worthless warnings about the dangers of unripe fruit and the inhalation of foul odours were repeated but much new effective advice was also given. Stress was laid on the need for disinfecting the faeces and water closets with carbolic acid and vitriol, soaking the clothes of choleraic patients in a solution of corrosive sublimate and burning their mattresses. while the boiling of drinking water and the washing of hands with soap and water or Condy's Fluid before eating was strongly advocated.

The disease wrought havoc on the continent but Malta continued to enjoy a rare immunity until July 1887 when the first dubious cases occurred. On the 29th July a fruit-vendor from Lija was taken suddenly ill on the road near Porte des Bombes on the way to Valletta. He was conveyed to the Central Hospital where cholera was suspected. The patient was then removed to the Manoel Hospital for contagious diseases near the lazaretto and died there on the following day. Another case, from Zabbar, was received into hospital on the 30th July and died the next day. On the appearance of the illness the opinions of medical men, as had happened on similar occasions, were not unanimous as to its nature but in a very short space of time the unequivocal signs of the disease proved beyond doubt that the disease was Asiatic cholera.

Though Pettenkofer's 'miasma' theory still had its adherents, the opinion generally held by the profession, both in Malta and abroad, was that cholera was a specific disease produced by a micro-organism. Many Maltese practitioners were satisfied that this organism was Koch's spirillum, a view that was strengthened by the fact that the vibrio was isolated by Dr. G. Caruana Scicluna and Dr. A. M. D. Bruce from some of the cases of this epidemic. Prof. S. L. Pisani, the Chief Government Medical Officer of the time, while admitting the great difficulty in tracing the origin of the outbreak to an imported case, had no doubts that the germ had been introduced into the Island from Sicily at a time when no quarantine measures had been imposed on that country under the false impression that it was free from infection.[46]

At first it was hoped that the disease would remain confined to a few cases, but far from doing so it attacked one locality after another forming a series of local epidemics. Hundreds of panic-stricken people fled from Malta and repaired for safety to Gozo which escaped from cholera completely. The Governor lost no time in appointing a Central Committee, over which he himself presided, to provide the necessary means to prevent the spread of the illness and to relieve the indigent struck down by the disease. The Manoel Hospital was reorganised to enable it to meet the needs of the new situation with greater efficiency. The medical staff was increased, the Admiralty lent casks for carrying water to the hospital from the mainland and also lanterns and candles to light the way through which the sick were conveyed to the hospital at night.

---

[44] *Il Barth*, 15th November 1873, p. 333; 29th January 1874, p. 377.

[45] *Twissiet fuq il mard tal kollra maħruġin mill Gvern*, Malta, 1885.

[46] Pisani, S. L., *op. cit.*, p. 18.

The propagation of the disease, especially to the Cottonera area in the course of the first week of August, suggested the necessity of setting up other hospitals to be put into use at a moment's notice. The Government Elementary School on St. Margherita Hill at Bormla was equipped as a hospital while another one was set up in the Crown Works outside Porte des Bombes. The one at Bormla was opened on the 9th August but serious difficulties were met with in obtaining the services of medical officers. Though a few offered their services, others were prepared to serve only in hospitals near their homes; others agreed to work in hospitals provided that their duties did not interfere with their private practice while a number of practitioners declined to accept employment in cholera hospitals. As an inducement, government offered a pay of twenty shillings a day and rations for a twelve-hour day but even this offer hardly met with any better response on the part of private practitioners of whom only a few came forward. In contrast to the reluctance shown by private doctors, the medical officers in government employment quite spontaneously declared their willingness to work in cholera hospitals. Although the offer of some of them was accepted, that of the great majority could not be availed of as they were indispensably required at their usual posts.

St. Joseph Hospital at Zebbug was placed at the disposal of government by the Bishop and was eventually equipped as a cholera hospital but it was never opened as such because of the lack of medical officers and the small number of cases that occurred in that locality. Arrangements were also made to use Santo Spirito Hospital for cholera patients but as there were only a few cases in that district this measure was not carried out.

Towards the end of August the epidemic assumed a serious aspect at Zabbar and, a little later, also at Zejtun which was then one of the most thickly populated villages in the Island. None of these villages was drained and good drinkable water was only supplied late in the epidemic. The need of hospitals in each of these localities became imperative. A hospital was opened at Zabbar in the Government Elementary School and another in the school house of Zejtun. The District Medical Officers and the Parish Priests of the two villages came forward to take charge of these emergency institutions 'with a spirit worthy of the highest praise'. The nursing of the sick in these and in other hospitals was successfully undertaken by the Sisters of Charity, the Sisters of St. Joseph and by a Miss Butler with hired nurses under their direction. His Excellency the Governor, Sir J. A. Lintorn Simmons spoke thus of them: 'A noble band of women who devoted themselves in the most self-denying manner to alleviate the sufferings of their afflicted fellow beings in perfect accordance with the calling of their Christian professions.'[47]

At the outset of the epidemic additional District Medical Officers were appointed and the public dispensaries were supplied with those medicines which were then prescribed against cholera—camphorated spirit, vinegar, rum and cognac. An opium preparation was given gratuitously as a preventive to anyone applying for it. Great store was laid on this remedy so that the Comptroller of Charitable Institutions declared, after the epidemic was over, that had it 'been more extensively used there is no doubt that many cases which ended fatally would have been saved'; but the people's distrust of the measures adopted by the government militated against the good intentions of the health authorities. Indeed such was the fear of this remedy that far from applying for its acquisition people concealed cases of diarrhoea lest the patients were made to drink the medicine on the alleged deadly effects of which reports of a most fantastic kind were in circulation among the lower classes. On account of these rumours the sick evinced an obstinate reluctance to be removed to hospital where the medicine—known as the '*tazza*' in Maltese, i.e. the 'glass' in which the medicine was poured—was believed to constitute the only treatment to which they would be subjected. Fortunately, however, those patients who came out of hospital after their recovery were in a position to show that the 'tazza' story was nothing but a hoax. In this way the opposition to hospital treatment became less intense and the medicine was more widely made use of especially at Zejtun and Zabbar where the demand for it could hardly be met.

Apart from opium and other medicinal preparations, counter irritation of the pneumogastric nerve was resorted to. It was applied to that portion of the nerve between the mastoid process and the angle of the jaw and sometimes acted 'like magic, the patient sleeping after its use and awakening well'.[48] Although great importance was still attached to the wearing of an abdominal binder, known as a 'cholera belt', in warding off the disease it is noteworthy that the part played by the water supply as a carrier of the disease was fully appreciated by this time and that steps were taken to eliminate dangers from this source. The Central Sub-committee expressed the conviction 'that contaminated wells are the greatest danger and that good water is the best medicine'.[49] It was, in fact, realised that if pure water were introduced under pressure to all the towns and villages of the Island and proper precautions taken with regard to sewage disposal cholera would never lurk near Malta.[50]

The epidemic began to abate by the beginning of September and by mid-November it had died out. Seven hundred and sixty-one cases are known to have occurred but many cases were not reported.[51] The average rate of mortality in the various hospitals was 53 per cent which compared very favourably with the fatality rate of cases treated at home which rose to 69 per cent. Considering that on this occasion the manifestations of the illness took on a mild form and that the number of persons attacked was limited, the mortality rate as a whole was rather high compared with previous outbreaks.

---

[47] *Malta Government Gazette* of 10th December 1887, p. 479.

[48] Pisani, S. L., *op. cit.*, p. 5.

[49] *First Report made to the Central Committee appointed by H.E. the Governor to Check the Spread of Cholera*, Malta, 1887.

[50] Lambert, G., *Grand Masters of the Hospitallers*, 1891, p. 191.

A widespread social and economic upheaval followed in the wake of this epidemic. There was an almost complete cessation of trade particularly that connected with shipping which alone involved some 1,800 coal-heavers. Many families found themselves reduced to poverty and incapable of earning a livelihood. A large quantity of chattels and articles of dress were pawned at the public pawnbroker's known as the 'Monte di Pietà' to meet the most urgent needs of the moment. An appeal to public charity was made for the collection of funds to aid the indigent. This appeal was generously responded to but the sum raised was inadequate to meet the expenditure needed for relief and had to be supplemented from the public treasury. Communal kitchens—called Soup Kitchens—were organised in various towns and villages for the free distribution of soup, meat and bread to the poor. At Bormla alone two thousand rations were issued daily. The poor of Valletta were given relief by a committee appointed for the purpose by the Bishop. The naval and military authorities helped generously by lending kitchen ranges and providing bread made by the Commissariat Department. No effort was spared to promote public works for the relief of unemployment, a measure which alleviated to a considerable extent the distress of those who had lost their employment by the disruption of shipping.[52]

THE CHOLERA OF 1911

Following its diffusion from Persia into Europe and North Africa in 1904, cholera was endemic in the Mediterranean basin for a number of years. The Maltese public health authorities kept themselves prepared for all eventualities and the Government Analyst was sent to Naples to study the epidemic that broke out there in 1910. The precautionary measures enforced in Malta succeeded in preventing its introduction into these Islands until the 2nd October 1911 when the disease visited us again on the occasion of the immigration of nearly two thousand refugees, mostly of Maltese nationality, from Tripoli and Benghazi following the outbreak of war between Italy and Turkey. Hundreds of these refugees who had no relatives or friends in Malta were temporarily housed at the Lazaretto but on the 6th October they were transferred to Mghieret where tents had been erected to receive them in a field adjacent to the Poor House, the camp being administered and supplied with food from this institution.

---

[51] Letters to Government from 23rd March 1883 to 20th April 1888, fols. 725–753, Medical & Health Archives, Valletta.

[52] *First Report made to the Central Committee appointed by H.E. the Governor to Check the Spread of Cholera*, 1887; *Second Report* 1887; *Third Report* 1887; *Fourth Report* 1887; *Final Report* 1887.

The first case among them occurred on the 15th October. From the camp the disease spread to the Poor House and then, gradually and unevenly, to various localities giving rise to local outbreaks. The public water supply was suspected of carrying the germ of the disease but the vibrio was never isolated from drinking water. The probable means of its transmission was through personal infection from case to case and through food infected by specifically contaminated flies which were exceedingly numerous in the camp.

The epidemic came to an end after sixty-seven days, the last case occurring on the 20th December. The Poor House, Zejtun and Qormi were most severely hit. Gozo escaped the infection. One hundred and sixteen cases were reported of whom eighty-five died representing the very high mortality of 73 per cent of persons attacked.[53]

---

[53] Report on Cholera in Malta in 1912; Report of the Working of the Laboratory for 1911–12; Report on the Public Health Department 1911–12, *Malta Government Gazette Supplement*, 11th October 1912; Report of the Comptroller of Charitable Institutions 1911–12, *Malta Government Gazette Supplement*, 22nd November 1912.

CHAPTER 20

Leprosy

THE leper was a common sight in many of the towns and villages of Europe in the Middle Ages. It has been said that leprosy existed in Malta during the rule of the Arabs (A.D. 870–1090) and that Santo Spirito Hospital at Rabat was a leprosarium[1] but no evidence has been produced in support of this assertion. While it is a fact that leprosy is known in the Maltese language by its Arabic name of 'ġdiem', it is noteworthy that Saint Lazarus, the leper saint, has elicited no special veneration from our forefathers as have other saint protectors of illnesses common in Malta in the past. It is true that the right foot of the saint found a place in the Co-cathedral of St. John at Valletta[2] but this relic was brought from Rhodes by the Knights of St. John as late as the sixteenth century together with several other remains of saints and has no association with the existence of leprosy in Malta. The disease seems to have been prevalent in Rhodes because laws had been enacted by the Knights concerning 'the sick of St. Lazarus' who, while being the recipients of special charities from the Order of St. John were subjected to certain restrictions in the interests of the public health. Thus they were not allowed to follow certain occupations without first obtaining a license from the sanitary authorities and they were debarred from social intercourse with healthy persons who, in turn, were prohibited from receiving any goods from lepers under penalty of a heavy fine.[3]

An early recorded case of leprosy in Malta is that of a Dominican Friar. On the 1st July 1629 the Priory of St. Dominic of Rabat bought a 'white slave for sixty ounces, called Bacher, from Castelnuovo' to attend to the needs of the patient who died a leper on the 30th April 1630.[4] This was not an isolated case of the disease for on the 29th October 1659 the Council of the Order of St. John was expressing its concern about the fate of the sick poor suffering from leprosy.[5] Further references to this illness are to be found in the recommendations made by the Venerable

---

[1] *Il Barth*, 20th January 1874, p. 374.

[2] Ferres, A., *Descrizione storica delle chiese di Malta e Gozo*, Malta, 1866, p. 140.

[3] Manuscript 153, fol. 42t, Royal Malta Library. Manuscript 740, fol. 36t, Royal Malta Library.

[4] De statu trium conventum, Parte I, fols. 129t and 188, Archives of the Dominican Priory, Rabat, Malta.

[5] Archives 121, fol. 53, Royal Malta Library.

Commissioners who were appointed to inquire into the management of the Holy Infirmary and who submitted their report on the 21st March 1679. They proposed that foreign lepers who had no relatives in Malta to look after them were to be housed in that part of the infirmary known as the 'falanga' which was reserved for patients suffering from 'contagious' diseases.

Before alleged lepers were admitted into the infirmary they were examined by the whole medical and surgical staff of the hospital in the presence of the Venerable Hospitaller, the Infirmarian and the 'prud'-hommes' to ascertain that the disease was really leprosy. In the case of lepers living in Malta no in-patient treatment was considered necessary by the Commission; on the contrary it was suggested that they should be granted financial aid and retained in their own homes. All these recommendations were approved by the Council of the Order and carried into effect.[6]

In 1687 Dr. Giuseppe Zammit, the holder of the Chair of Anatomy and Surgery at the surgical school of Malta, read a paper before a medical assembly held at the Holy Infirmary in which he described five cases of leprosy.[7] In 1702 barbers were officially warned of the dangers presented by clients affected by the disease.[8] The regulations of the Holy Infirmary published in 1725 referred to the daily monetary allowance provided to poor invalids and leprous people.[9] Leprosy forms the subject matter of a whole chapter in Dr. G. Demarco's treatise on skin diseases written in 1764;[10] but the existence of this malady in Malta in the eighteenth century was known not only to the medical profession but also to cultured laymen. In fact in a diary of this period there is an entry bearing the date of the 21st October 1770 to the effect that a nun of the Monastery of St. Catherine of Valletta 'developed ulcers and fever and also became leprous'. Three weeks later she was dead.[11] The same diarist informs us that on the 15th May 1772 the leper son of a high Turkish official from the Levant touched at Malta in the company of his personal Greek Physician on his way to Montpellier where he was going in search of a cure.[12]

In 1808 Dr. G. Saydon, after describing a case of tubercular leprosy in a Maltese sailor on a Turkish ship, suggested that the illness was of a contagious nature because two other members of the crew on the same vessel presented similar lesions. Allusions to leprosy are also met with in the proceedings of the 'Accademia Medica Maltese' which held regular meetings up to 1837.[13] We next hear of a case diagnosed as leprosy by Professor C. G. Schinas in 1835. Between 1839 and 1858 four male members of the same family (the father and his three sons) were known to have died of the disease while two Maltese sisters who had returned to Malta from the Island of San Domenico also succumbed to this malady together with their maid between the years 1851 and 1863.[14] By 1847 Malta was included among the seats of leprosy.[15]

---

[6] Archives 262, fols. 97 and 141, Royal Malta Library.

[7] *Reports on Leprosy in Malta by a Committee Appointed by H.E. the Governor in 1917, Final Report*, Malta, 1919, p. 5.

[8] Galea, J., and Bonnici, E., 'Leprosy in Malta', *Leprosy Review*, 1957, xxviii. 140.

[9] *Notizia della Sacra Infermeria*, Rome, 1725.

[10] Manuscript 36, no pagination, Royal Malta Library.

[11] Manuscript 1146bis, fol. 74, Royal Malta Library.

[12] *Ibid.*, fol. 189.

In 1862 an inquiry was instituted on behalf of the Secretary for the Colonies by the Royal College of Physicians of London into the 'character and progress of the disease of leprosy' which was believed to have been on the increase in the colonies. A questionnaire was sent to many British possessions overseas including Malta. The Maltese Government appointed a medical commission to study and answer the questionnaire bearing on the incidence of leprosy in the Island. When the report of the Royal College of Physicians was eventually published in 1867 Malta was listed among those places in which it had been ascertained that leprosy was unknown. The compilers of the report, however, did not feel convinced of the absence of leprosy in Malta and they considered it far from improbable that the disease actually occurred although this fact was unknown to their respondents.[16] It is conceivable that at this period the disease may have gone unrecognised because it might have been mistaken for some other cutaneous disorder or for the manifestations of syphilis as is known to have happened elsewhere.[17] If any doubts still existed as to the presence of leprosy in the Island they were dispelled completely not many years later. Dr. Gavino Gulia, who had been one of the members of the local commission of 1862, after having been told of a patient who appeared to suffer from the disease published his own personal observations of a case studied by him in 1874. Reports of two other cases were published in the same year.[18]

Two circumstances occurred at this period which contributed to focus attention on the disease and which may have also been responsible for an increased incidence of leprosy in Malta. In 1872 many Maltese settlers in North Africa returned to Malta probably carrying with them the germ of the illness from the African coast where leprosy was prevalent, while in 1878 six thousand Indian troops arrived in the Island in connection with the Russo-Turkish war and were stationed at Imriehel. This site is in the vicinity of Qormi, Naxxar and Zebbug and it was from these villages that leprosy cases were most numerous according to the earliest statistics collected on the subject.[19]

---

[13] *Reports on Leprosy in Malta* . . . p. 5.

[14] *Il Barth*, 29th January 1874, p. 373; of 4th April 1874, p. 400.

[15] *Il Barth*, 6th August 1874, p. 427.

[16] *Report on Leprosy by the Royal College of Physicians prepared for Her Majesty's Secretary of State for the Colonies*, London, 1867, p. lxxiii.

[17] Gemy and Raynaud, 'Étude sur la Lèpre en Algérie', *Mitteilungen und Verbandlungen der internationalen wissenschaftlichen Lepra-Konferenz zu Berlin im Oktober 1897*, Berlin, 1897, p. 63.

[18] *Il Barth*, 29th January 1874 and 4th April 1874, pp. 373 and 399.

By 1883 the dissemination of the disease had attracted sufficient attention to induce the government to appoint a medical committee to inquire into the prevalence of leprosy in the Island. This committee, reporting in 1886, found that the disease was confined almost entirely to the rural population with a preference for certain localities. They studied the question of its transmission and, after considering the contagious theory, came to the conclusion that leprosy was chiefly propagated through heredity. As a measure to control the spread of the disease they recommended the seclusion of lepers in a suitable asylum where the necessary treatment would be available.[20]

A statistical survey drawn up in April 1890 showed that there were sixty-nine known cases of leprosy in Malta and Gozo, a figure that subsequent experience proved to be incorrect, the real number of sufferers being nearer the one hundred mark. Eleven of them were being kept at the Hospital of Incurables while the rest were scattered in different parts of the two islands. The greatest number of them lived in Qormi and Mosta; four of the eight lepers from Gozo resided at Nadur. Of the patients living at home only nine were willing to enter an asylum but it was found impossible to accommodate even this small number in the Hospital of Incurables. The Comptroller of Charitable Institutions, besides, did not wish to encourage more patients suffering from this disease to enter the Incurables as he feared that they would be a source of infection to other patients. The new Poor House was then under construction and it was hoped that with its opening it would be possible to admit an increased number of lepers. A very disturbing fact was the discovery that the occupation of some of the sick brought them into very close contact with healthy persons; thus there were a baker, a pastamaker, a cook, a milkman and a shopkeeper. In those days special institutions were being set up for lepers in various British colonies and it was felt that similar measures for the isolation and treatment of these patients should be provided in Malta. The Comptroller of Charitable Institutions had also in mind the prevention of the disease and accordingly advised the government to have recourse to legislation to check its spread. This advice was acted upon, though tardily, and on the 1st March 1893 Ordinance No. VII 'for checking the disease commonly known as leprosy' was passed by the Council of Government. It was patterned on similar laws existing in other British colonies.[21]

In accordance with Ordinance No. VII every doctor who, in the exercise of his profession, observed any case of leprosy was obliged to report it to the Chief Government Medical Officer. It was also made an offence knowingly to harbour any leper with the intent to conceal his disease or to prevent his removal to the asylum. Detention in the asylum, after examination by a medical board, was by a warrant from the Head of the government. There was only one way of avoiding detention in the asylum and that was by emigrating and settling in another country; in fact the law allowed any asylum patient to leave the Island for the purpose of fixing his residence abroad.

---

[19] Bugeja, J., 'Leprosy in Malta', *Malta Government Gazette Supplement*, 27th November 1931, p. 1347.

[20] *Reports on Leprosy in Malta . . .*, p. 5.

[21] Letters to Government from 20th April 1888 to 8th April 1895, fol. 300, Medical & Health Archives, Valletta.

In conformity with the new law it became necessary to provide a place for the isolation of lepers. The government was aware that this measure amounted to a serious curtailment of personal liberty and to seclusion of the patient from the community for the rest of his life. Every endeavour was therefore made to ensure that the institution intended for the keeping of these patients would afford every reasonable comfort and that as long as no communication with the outside took place and as long as the separation of the sexes was effectual, no unnecessary restrictions were to be imposed while ample grounds for work and recreation were to be provided.

The places proposed for conversion into a leprosarium were Selmun Tower on Mellieha Ridge or a large house on the Island of Kemmuna but in each case the premises were too small;[22] both sites were discarded and eventually an *ad hoc* hospital was built near the Poor House at Inghieret. The Male Division was completed at the end of 1899 and was occupied in January 1900 but the Female Wing did not come into use until 1912 so that it was only after this year that the law of 1893 was completely enforced and the compulsory segregation of lepers became general in Malta. At this period the promise of the discovery of a 'cure' for leprosy was very much in the public eye and the government was criticised for erecting the additional accommodation for women patients. The optimists were eventually disappointed with the new 'cure' but as the government took the view that leprosy was not an everlasting disease the new block was built in such a way as to be easily convertible into an additional wing of the Poor House if the future showed that the asylum was no longer needed.[23] The building consists of a central administrative block and two lateral wings at right angles to it with accommodation for one hundred patients.[24]

The early days of the new institution were marked by episodes of a stormy and turbulent nature as restriction of liberty was from the very beginning ill tolerated by the patients. On the 24th May 1900 the fifty-four male lepers in the asylum were in a 'mutinous state' and having overpowered the attendants succeeded in forcing their way out of the asylum. The police had to intervene before order was restored and a number of policemen were subsequently stationed at the hospital to prevent further disorders.[25] But a few months later, one September evening in 1900, the lepers again mutinied. They extinguished the lights of the hospital, broke all the lamps, disconnected the telephone and then rushed into the grounds pelting the windows with stones and breaking the glass panes. In the darkness that prevailed it was difficult to cope with the rebels but order was re-established after a strong detachment of police was brought on the scene.[26]

---

[22] Letters to Government from 20th April 1888 . . ., fol. 639.

[23] *Further Correspondence Relating to the Political Conditions of Malta, Cd. 715*, London, 1901, p. 138.

[24] Galea, J., and Bonnici, E., *op. cit.*, p. 141.

Another episode of violence occurred in April 1902 when the patients were so disorderly and aggressive that the Superintendent, finding it impossible to carry out his duties, had to leave the place for a time when the police stationed at the hospital declared themselves unable to maintain order. Things had reached such a pass that it was feared that it would no longer be possible to go on with the work of the institution and that more serious disturbances were to be expected in the future. The Comptroller of Charitable Institutions took such a grave view of the situation that he suggested to the Acting Chief Secretary to the Government that the question be brought before the Executive Council.

Meanwhile steps had been taken to alleviate the hardships of the sick and to combat the activity of the disease. Financial relief was granted to the families of patients who, as a result of the confinement of the breadwinner in the leprosarium, found themselves in distress, while every effort was made to induce the sick to take chalmoogra oil—a form of therapy that was refused by the majority of the patients;[27] but in spite of these and other endeavours on the part of the medical authorities to render the seclusion of the sick as little irksome as possible, the lepers' determined opposition against a law enforcing their isolation did not cease. Escapes were so frequent that in order to deter the patients from absconding it was proposed to make an escape from the leprosarium a criminal offence, the escapee being liable to imprisonment for a period varying from one to six months.[28] A more constructive measure was, however, initiated at this period to help the patients to adjust themselves to institutional life. The young and able-bodied among them were given household employment and other work at a small monthly remuneration. By combating idleness and thus diminishing the opportunity for mischief a more orderly atmosphere reigned in the asylum and, though escapes continued to occur occasionally, the patients became more disposed to lead a peaceful and useful life in the institution.[29] No relaxation of vigilance over the inmates was, however, permitted; and to ensure better security the attendants of the asylum were granted some of the powers possessed by the police while six constables under the charge of a sergeant, and armed with revolvers when on night duty, continued to keep guard at the hospital for a number of years.[30]

---

[25] Letters to Government from 20th April 1888 . . ., fols. 515 and 611.

[26] *Ibid.*, fol. 550.

[27] Bugeja, J., *op. cit.*, p. 1347.

[28] Letters to Government from 10th April 1895 to 31st March 1903, fol. 534. Letters to Government from 1st April 1903 to 10th April 1909, fol. 48, Medical & Health Archives, Valletta.

[29] *Ibid.*, fols. 4 and 611.

In 1917 a committee was appointed by H. E. the Governor to study *de novo* the question of the seclusion of lepers. This committee drew up a preliminary report in September of the same year in which they stated that, because leprosy was a contagious illness and because the risk of contagion increased through its long duration, the isolation of lepers was the best available means of preventing the dissemination of the disease and, eventually, of stamping it out. On these grounds no recommendations were made for any fundamental changes in the existing law; however, having regard to the hardships that isolation entailed, they insisted that the patients should be given the best possible treatment. The committee also pointed out the need for the appointment of a Visiting Physician who was to study the disease and its treatment abroad so that the sick could feel that they were being detained not merely for the protection of others but also for their own benefit. The importance of detecting the disease in its earliest stages was strongly emphasised and in order to afford every opportunity to local medical practitioners to become acquainted with the disease, the committee suggested the establishment of a short course of practical instruction by the Visiting Physician of the leprosarium. The members of the committee were quite alive to the possibilities of research afforded by the asylum and they proposed the setting up of a laboratory in the hope that it might lead to the discovery of means of preventing the disease or of shortening its course.[31]

In October of the following year the committee submitted the Final Report. It was estimated that the incidence of leprosy was 0·472 per thousand—a rate which did not compare unfavourably with that obtaining in other countries where leprosy was endemic. It was found, too, that 31 per cent of the total number of lepers were agricultural workers and that the disease occurred with greatest frequency in the villages in the north-western side of the Island such as Naxxar, Gargur and Mosta, while the inhabitants of the towns were remarkably free from the malady. In view of the scanty results obtained by treatment, the committee reaffirmed the need for the compulsory segregation of lepers, but they felt that those patients in whom the disease had become arrested and who were no longer in an infective stage could be allowed to live out of the asylum.[32]

As a result of the recommendations contained in the above mentioned reports, Ordinance VII of 1893 underwent various modifications from 1919 onwards and several reforms were introduced which, while aiming at the control of the disease, tended to render treatment more efficacious and hospitalisation less irksome. A board was established to visit the hospital at least twice every six months.[33] Patients in the non-contagious stage of the illness were discharged conditionally and allowed to be treated out of hospital, while temporary leave from the asylum was granted in suitable cases.[34] Steps were taken for the examination of contacts (Act XV of 1929) while a Leprosy Control Officer was appointed in 1937 to take charge of all measures connected with the prevention of the disease.

---

[30] Letters to Government from 1st April 1903 . . ., fol. 36.

[31] *Report on Leprosy in Malta,* Malta, 1919.

[32] *Final Report on Leprosy*, Malta, 1919.

In December 1937 a leprosarium was opened in Fort Chambray at Gozo for the reception of the sick living in that island while in August 1938 the Malta asylum was separated administratively from the Poor House and given an independent organisation.[35] To remove the stigma attached to the disease the appellation of Leper Hospital was officially abolished, the title of the Malta hospital being changed to that of St. Bartholomew and of the Gozo hospital to that of the Sacred Heart as proposed by the patients.[36]

In spite of all efforts to combat the disease, the policy of segregation militated against the institution of early therapy as persons afflicted with the illness, instead of seeking treatment, did their best to conceal their malady until it became too far advanced for successful treatment. Fortunately the climate of public opinion with regard to the contagiousness of the disease underwent a change with the passage of time so that it became possible by April 1953 to move a bill in the Legislative Assembly for the purpose of dealing with leprosy in the same way as other infectious diseases and thus encourage sufferers to seek treatment in the early phases of the illness. The bill became law in July. Through the new act (No. XI of 1953) almost the whole of the old Lepers Ordinance was repealed barring a few provisions. Compulsory segregation was abolished except under certain special circumstances,[37] thus removing the greatest deterrent to early treatment.[38] The number of known lepers in the Maltese Islands in 1957 was one hundred and fifty-one representing a rate of approximately 0·64 per thousand on an estimated civilian population of 314,369.[39]

---

[33] *Malta Government Gazette Supplement*, 19th September 1919, p. 139. *Malta Government Gazette*, 24th October 1919, p. 799.

[34] *Report on the Health Conditions of the Maltese Islands for 1939*, p. 24.

[35] *Ibid.*, p. 24.

[36] *Report on the Health Conditions of the Maltese Islands for 1940*, pp. 32 and 36.

[37] *Malta Government Gazette*, 27th July 1953, p. 1293.

[38] *Report on the Health Conditions of the Maltese Islands for 1957*, p. 37.

[39] Galea, J. and Bonnici, E., *op. cit.*, p. 144.

CHAPTER 21

Tuberculosis

In the early years of the nineteenth century it was commonly believed that the Mediterranean climate was less productive of pulmonary diseases than that of the British Isles so that it became the custom for consumptives from the United Kingdom to travel to Italy, Malta and other Mediterranean countries to escape the British winter. With regard to the salubrity of the Maltese climate, however, there was a great diversity of opinion. Some represented it as being the hottest on earth while others considered it more variable and fickle than a northern one; a few travellers condemned it as outright unwholesome and went so far as to warn people in England against bringing their children with them to Malta as the air was 'by no means calculated for children under six or seven years of age'.[1] Others, on the contrary, proclaimed the Maltese climate to be remarkably healthy.[2] This last view ultimately prevailed and Malta became a popular winter station for invalids labouring under pulmonary affections, especially after the visit to the Island, in 1838, of Queen Adelaide who had been advised to sojourn for a while in Malta after an attack of bronchitis.

In the absence of statistical material it is impossible to say what was the incidence of pulmonary diseases in the past in Malta but it appears that phthisis was not uncommon in the eighteenth century, especially towards its close.[3] Dr. G. Demarco, in his *Tractatus de morbis pectoris* written in 1743, devotes a whole chapter to this condition of which he discusses the causes, manifestations, diagnosis and treatment.[4] Special precautions were taken at Santo Spirito Hospital and at the Holy Infirmary to avoid the spread of the disease; the patients were isolated and their clothing and utensils were marked with a distinctive sign to prevent them from being used by others.[5] The wards were 'purified' and the bedding of tuberculous cases was disposed of by burning. In some churches little boxes or basins were provided for persons suffering from cough to prevent them from spitting on the floor.[6]

---

[1] Blaquière, E., *Letters from the Mediterranean*, London, 1813, vol. ii, p. 281.

[2] Hennen, J., *Sketches of the Medical Topography of the Mediterranean*, London, 1839, p. 441.

[3] Sankey, F., *Malta Considered with Reference to its Eligibility as a Place of Residence for Invalids*, Edinburgh, no date.

[4] Manuscript 36, fols. 33 *et seq.*, Royal Malta Library.

[5] Archives 1714, fol. 42, Royal Malta Library.

[6] Howard, J., *An Account of the Principal Lazarettos in Europe*, London, 1789, p. 57.

Dr. John Hennen, reviewing the position from the year 1818 to 1823, stated that deaths through pulmonary affections, classed in the bills of mortality as cough, haemoptysis, phthisis and pleurisy, were very numerous. He found that during the above named period pulmonary diseases formed nearly 9 per cent of the whole mortality among civilians, phthisis alone being responsible for more than one-third of this number. These figures are exclusive of the deaths occurring in the Civil Hospitals; in fact, from 1821 to 1823, of the seven hundred and thirty-one patients admitted for lung diseases one in every four died. It must, however, be kept in mind that only the worst cases found themselves in hospital. By comparison mortality among the British troops in the Island was one in every fifteen cases of lung affections.[7] The validity of these estimates is open to doubt as some of the diagnostic terms on which statistics were based were vague and misleading. Thus Dr. John Davy, writing in 1842, observed that while the term 'consumption' was understood to mean pulmonary tuberculosis by British doctors stationed in Malta, it was used by Maltese medical practitioners to denote a condition of wasting and loss of strength without cough or other pectoral signs and symptoms. To avoid similar misconceptions in future, Davy proposed the abolition of the label 'consumption' from the official mortality statistics, a suggestion that was put into effect by the government. Davy was of opinion that the importance of pulmonary diseases as a cause of death had been overrated; there is no doubt, however, that tuberculosis was far from being uncommon. In fact Dr. Charles Galland, Professor of Anatomy at the Malta University, in a series of post-mortems performed during 1841 on 615 unselected cases dying from various illnesses found that approximately 13 per cent showed evidence of tubercular lung disease.[8]

Towards the mid-nineteenth century poverty, bad housing conditions and overcrowding were certainly favourable for the spread of the disease. The improvement in the economic state of the Island and the introduction of sanitary reforms at the beginning of the last quarter of the century were accompanied by a reduction in the general death-rate from 32 per thousand of the population in 1874 to 22 in 1876. The mortality from phthisis showed a parallel decline. In Malta it went down from 1 per thousand persons living to 0·8, constituting 3·6 per cent of the total amount of deaths.[9] Towards the close of the century the death-rate was still low—indeed much lower than in most European countries[10]—but the end of the first decade of the present century again showed a death-rate of 1 per thousand population.[11]

---

[7] Hennen, J., *op. cit.*, pp. 498 and 599.

[8] Davy, J., *Notes and Observations on the Ionian Islands and Malta*, London, 1842, vol. ii, pp. 280 *et seq.*

[9] Ghio, A., *Third Annual Report on the Mortality in Malta and Gozo*, Malta, 1877, pp. 12 and 15.

[10] Zammit, T., *Tuberculosis in the Maltese Islands*, Malta, 1900, p. 3.

[11] *Report of the Royal Commission of 1912, Minutes of Evidence, Cd. 6280*, London, p. 163.

During the First World War a slight rise was registered, the increase in tuberculous mortality being attributed to the straitened war conditions and to the influenza pandemic of 1918–19 which carried away a good number of consumptives and of potentially tuberculous persons whose deaths would otherwise have been staggered over the succeeding years. At the same time this sudden disappearance of so much infective material removed many sources of new contacts and new cases, the result of which appeared in 1924 when the mortality rate began to abate, reaching the figure of 0·63 per thousand in 1926—the lowest to be recorded since 1908 when the disease was made notifiable.[12] This decline continued in subsequent years until in 1939 it had fallen to 0·43 per thousand persons living.[13]

With the onset of the Second World War the decline was halted giving place to a steady increase in all forms of tuberculosis, the mortality from the pulmonary form of the disease alone representing a rate of 0·84 per thousand persons living in 1942.[14] The end of the war and the subsequent improved standard of living again brought about a diminution in incidence and mortality, which has been steadily maintained, the death-rate from lung tuberculosis in 1957 being 0·11 per thousand population.[15]

An anti-tuberculosis campaign was launched in 1946. A specially trained tuberculosis officer was entrusted with the examination and follow-up of contact families at a special clinic at the Central Hospital. He also paid domiciliary visits with a view to improving home hygiene. Financial aid was provided for those exposed to infection to increase their resistance against the disease by better feeding.[16] A scheme to help families whose breadwinners suffer from tuberculosis came into force in April 1952. A series of preventive measures has been taken, including the examination of all entrants into the government service, of children prior to admission into public and private institutions and of those frequenting the government primary schools; the isolation of tuberculous cases from their families by hospitalisation in Malta or abroad; and the granting of priority for better housing accommodation in the case of large families.[17] These preventive efforts were enhanced by the introduction of mass B.C.G. vaccination in the spring of 1950. This innovation was made possible through the generosity of the International Tuberculosis Campaign Organisation which not only sent a Norwegian medical team to the Island but also supplied the necessary equipment, tuberculin and vaccine, and bore the expenses involved in conjunction with the Malta Government. Maltese medical teams were trained by the

[12] *Report on the Health Conditions of the Maltese Islands during 1926*, Malta, 1927.

[13] *Report on the Health Conditions of the Maltese Islands for the year 1939*, p. xii.

[14] *Report on the Health Conditions of the Maltese Islands for the year 1942*, p. v.

[15] *Report on the Health Conditions of the Maltese Islands for the year 1957*, p. 45.

[16] *Report on the Health Conditions of the Maltese Islands for the year 1947*, pp. ii and xiii.

[17] *Times of Malta*, 12th April 1955, p. 5; 7th February 1959, p. 13.

Norwegians and a survey of the tuberculin reaction of a section of the population was carried out. Between March and June over 54,000 persons were tuberculin tested and more than 38,000 vaccinated with B.C.G.[18] After the I.T.C. mission left Malta in July 1950 a B.C.G. vaccination centre was established by the Maltese Ministry of Health so that a local team now carries out free immunisation against tuberculosis. This venture was so well received by the public that by the end of 1957 over 69,000 persons had been inoculated.[19]

THE CONNAUGHT HOSPITAL, MDINA

In July 1898 the medical staff of the Central Hospital forwarded a report to the Comptroller of the Charitable Institutions on the incidence of tuberculosis and its treatment. They entertained the hope that as soon as the financial situation permitted the Government would follow 'the lead of other enlightened countries in the humanitarian mission of alleviating sufferers in that line and of reducing to some extent the high rate of mortality'. The Comptroller fully endorsed the recommendations contained in this report but added that nothing short of the provision of a new general hospital could deal effectively with this problem.[20] The much hoped-for general hospital did not materialise and it was not until the beginning of the present century that an ancient palace at Mdina was equipped for use as a tuberculosis hospital.

The edifice was formerly the Magisterial Palace erected by Grandmaster L'Isle Adam and rebuilt two centuries later by Grandmaster Antonio Manoel de Vilhena. In the Order's time the Governor of Mdina had his seat in this building together with his judges so that the palace also housed the Courts of Law and the prison of the old city.[21] It was first used as a temporary hospital during the cholera epidemic of 1837 under the direction of Dr. T. Chetcuti. It was turned into a military hospital in 1858 for the treatment of eye diseases and in 1860 it was converted into a convalescent home for British troops.[22] This conversion of 'a tribunal of tortures and barbarities into a good hygienic sanatorium' called forth the enthusiastic approval of the editor of the local medical journal *Il Barth* who exclaimed: 'How times have changed! In this place in former days men were imprisoned in frightful dungeons . . . while to-day convalescent patients respire pure air, so rich in ozone, of the large halls where in the unhappy days of old ruled merciless judges.'[23]

As early as 1872 the Comptroller of Charitable Institutions had tried to obtain possession of these premises in order to convert them into an asylum for the aged in place of the Ospizio at Floriana, but it was not until 1908 that the building was handed over to the Civil Government when it was adapted for the reception and treatment of tuberculous patients who had, up to that time, been admitted into the Central Hospital. It was inaugurated by His Majesty King Edward VII on the 22nd April 1909 and named the 'Connaught Hospital' after H.R.H. the Duke of Connaught (Edward VII's brother), who contributed eight hundred pounds for its equipment and who at the time had his headquarters in Malta as Commander-in-Chief in the Mediterranean.[24]

---

[18] Zammit-Tabona, V., 'Mass B.C.G. Vaccination in Malta', *British Medical Journal*, 1952, i. 837.

[19] *Report on the Health Conditions of the Maltese Islands for the year 1957*, p. 12.

[20] Letters to Government from 10th August 1895 to 31st March 1903, fol. 425, Medical & Health Archives, Valletta.

[21] Ferres, A., *Memorie dell'Inclito Ordine Gerosolimitano*, Malta, 1881, p. 226.

[22] *The Malta Times*, 9th February 1860, p. 2.

[23] *Il Barth*, 6th March 1875, p. 497.

Originally the hospital contained sixty beds. By subsequent structural modifications the number of beds was increased first to ninety-five and then to one hundred and seventeen but the general unsuitability of the building and of the nursing arrangements gradually led to discontent and persistent lack of discipline among the patients. Matters came to a head on the 16th July 1934 when forty-two patients, alleging that their supper was insufficient, left the hospital in the evening with the intention of obtaining an interview with His Excellency the Governor and submitting a formal complaint to him. The demonstrators were met at Attard by the Commissioner of Police who induced them to return to hospital. Three days after this incident a Committee was appointed to inquire into the patients' complaints and to submit recommendations for improving hospital administration.

The Committee reported in September and, among other important suggestions, it proposed the erection of a Hospital-Sanatorium, i.e. separate hospital and sanatorium buildings on the same site to facilitate the transfer of patients from one place to another in accordance with their clinical and therapeutic requirements. Pending consideration of this proposal the Committee stressed the immediate need of increasing existing accommodation. Indeed there were no dining rooms for the sick, no recreation facilities and no proper quarters for the nursing and medical staffs.[25]

A new wing was erected in 1937 but even with this expansion it was realised that the hospital was far from being a suitable one; in fact the Chief Government Medical Officer could not help declaring that the hospital could 'only be considered as fit for use as such on account of the lack of other available premises'.[26] The erection of a Tuberculosis Block in the grounds of St. Luke's Hospital at Gwardamangia, the conversion of the Connaught Hospital into a home for quiescent cases and the provision of an occupational therapy and holiday establishment in such places as Tal Virtu or Tal Gholja were envisaged as part of a scheme for the better control of the disease put forward by the Chief Government Medical

[24] Galea, A. M., *Il Carità f'Malta u Ghaudex*, Malta, 1912, p. 34.

[25] *Malta Government Gazette Supplement*, 20th September 1934, pp. 861 *et seq.*

[26] *Report on the Health Conditions of the Maltese Islands for the year 1937*, p. 35.

Officer in 1937.[27] Proposals for the treatment of tuberculosis at St. Luke's Hospital were still being made up to 1959.[28]

In spite of the general agreement on the part of the government and of public opinion that the Connaught Hospital should be replaced by more suitable and modern accommodation, the erection of a sanatorium could not be undertaken by the government for financial reasons. A new hospital for tubercular cases was estimated to cost, in 1952, about £80,000 to £100,000. In May 1953 a Parliamentary Select Committee was appointed to find ways and means for the raising of funds, but the government was defeated soon after and the Committee lapsed with the dissolution of Parliament.[29]

Pending the erection of the hospital, arrangements were made in July 1955 to ensure the treatment of tuberculous patients in hospitals in England and in Italy[30] and sixty-nine patients were flown to London and to Milan in accordance with this scheme towards the end of November.[31] Those who did not go abroad were transferred to St. Vincent de Paul Hospital, and the Connaught Hospital was closed down on the 16th January 1956.

At Gozo tubercular patients are treated at St. Theresa Hospital at Tal Ibrag near Victoria. This building was formerly used as an ophthalmic hospital but it was converted into a tuberculosis hospital on the 2nd August 1933.[32]

---

[27] *Report on the Health Conditions of the Maltese Islands for the year 1936*, p. 177.

[28] Ganado, W., 'Pulmonary Tuberculosis', *Times of Malta*, 2nd January 1954, p. 4. 'The Five Year Plan—Health', *Times of Malta*, 2nd November 1959, p. 5.

[29] *Times of Malta*, 29th October 1952, p. 3; 8th May 1953, p. 8; 31st October 1953, p. 6.

[30] *Report on the Health Conditions of the Maltese Islands for the year 1957*, p. 12.

[31] *Times of Malta*, 1st December 1955, p. 9.

[32] *Report of the Comptroller of Charitable Institutions for 1933–34*, p. vi. *Report on the Health Conditions of the Maltese Islands for the year 1957*, p. 130.

CHAPTER 22

Venereal Diseases

As the propagation of venereal diseases depends mainly on the frequency of promiscuous sexual relations occurring in a community, it will be pertinent to consider in brief the development of prostitution in Malta. The harlot has existed at all times in all places but in Malta this feature of social life assumed importance only after the Order of St. John took possession of the Island in 1530.

That the members of the monastic Order of St. John did not always adhere to their vows of chastity is shown by the statutes of the brotherhood which, as early as 1421, forbade the knights from associating with prostitutes and from maintaining mistresses.[1] By 1551 the town of Birgu, where the knights had settled on occupying Malta, was notorious for the many Greek, Italian, Spanish, Moorish and Maltese courtesans that lived there.[2] When the building of the new city of Valletta was taken in hand in 1566 it was intended to reserve a portion of it—known as the '*collachio*'—for the sole use of the knights as had been the practice in the past at Rhodes. The separation of the knights from the people, however, was found impossible to achieve and in order to prevent 'public scandals' as much as possible it was proposed to send away foreign prostitutes from Malta and to confine Maltese ones to 'some remote part' of the city. It was also suggested that these women should neither wear a '*manto*' nor be allowed to enter the Conventual Church of St. John, and not even to walk the streets of the city or take trips by sea.[3] With the passage of years corruption and moral decadence had seriously infiltrated the ranks of the Order so that by 1581 the vow of chastity to which every knight pledged himself on joining the fraternity had become practically extinguished.[4] In 1586 the German Samuel Kiechel, who spent twenty days in Malta, wrote that German Knights had mistresses to whom they went every day while another contemporary German visitor was also struck by the extraordinary number of courtesans, both foreign and Maltese, in the Island.[5]

---

[1] Bosio, I., *Gli statuti della Sacra Religione di San Giovanni Gerosolimitano*, Rome, 1589, p. 264.

[2] Dessoulavy, C. L., 'Visitors to Malta from the 15th to the 18th Century', *The Sundial*, 1940, iv. 97.

[3] Archives 6426, fol. 44, Royal Malta Library.

[4] Falcone, P., 'Una relazione di Malta sulla fine del cinquecento', *Archivio Storico di Malta*, 1934, iv. pp. 5–10.

[5] Dessoulavy, C. L., *op. cit.*, pp. 99.

To remedy this state of affairs it was suggested that a number of Jesuits be sent to Malta to reform the knights. The proposal was also put forward to expel the prostitutes from the capital, Valletta.[6] Accordingly towards the end of June 1581 Grandmaster Jean l'Evesque de la Cassiere issued an edict banishing all street women from the city. Unfortunately he allowed the concubines of his friends and of some of the more powerful dignitaries of the Order to remain in town, a measure which was so much resented by the more youthful members of the fraternity that they provoked his deposition from office to which he was reinstated only after the intervention of the Holy See.[7]

To this period belongs the earliest reference to the existence of the 'French disease' in the Island though there is no doubt that local physicians were familiar with its manifestations long before this time. They knew that the 'morbus gallicus' was contracted through sexual intercourse and that enlargement of the inguinal glands could be one of its signs. Indeed many cases of plague at the onset of the epidemic of 1592 were mistaken for venereal infections because of the swollen inguinal glands of the patients.[8] It seems that the number of persons suffering from venereal disease had become quite appreciable by 1596 as the question of providing a place for the treatment '*pro laborantibus morbo gallico*' was raised at the meeting of the Order's Council held on the 28th March of that year.[9]

As time went by the prostitutes again returned to Valletta. The government appears to have given up its former policy of keeping them away from the capital and seems to have limited itself, in 1631, to prohibiting them from living in certain specified streets such as St. John's Street, St. James' Street and St. George's Street (now Kingsway)—a provision that with various modifications and additions survived well into the twentieth century.[10] The English traveller George Sandys, who came to Malta in the early years of the seventeenth century, made the scathing remark that there were three nunneries in Valletta—'the one for Virgins, another for penitent Whores (of impenitent here are store) and the third for their Bastards', the last two allusions being to the Magdalen Asylum and to the Foundling Hospital respectively.[11]

The position in 1677 has been recorded by a representative of the Holy See.[12] Valletta was then noteworthy for the 'remarkable' number of dissolute women and for the libertinism in which people lived. Following the plague epidemic of 1675–76 a certain amount of laxity in the sexual conduct of all strata of the population had occurred. It seems, however, that the periodical movements of the Order's fleet were also partly responsible for during the spring and summer the navy sailed out on cruises and the sailor's wives took this opportunity 'to have some fun', as the dignitary of the Holy See puts it. It sometimes happened that the ships returned to harbour quite unexpectedly during the night and when the sailors went home they found that their nuptial beds were being shared with someone else. Naturally these circumstances were attended by 'many disorders' to obviate which it was decided that galleys entering port after dark were not to allow their crew to go ashore until daybreak. Prostitutes did not shrink from boarding ships in harbour until they were prohibited from going on board ships in 1754 under penalty of a public flogging.[13] This measure was not, however, effective in breaking the knights' association with these women. Indeed an eye-witness wrote that when three galleys sailed from Malta in 1770 to fight the Bey of Tunis about thirty knights in each ship made 'signals all the way to their mistresses who were weeping for their departure upon the bastions'.[14] When Sonnini, the friend of Buffon, passed through Malta on his way to Egypt in 1777, he observed that there were 'hordes of priestesses of Venus from every nation' who communicated diseases to the crews of ships calling at the Island.[15]

---

[6] Vianello, C. A., 'Proposta del 1581 per una riforma dell'Ordine di Malta', *Archivio Storico di Malta*, 1939, x. 244–256.

[7] Falcone, P., *op. cit.*, pp. 5–10.

[8] Parisi, P., *Aggiunta agli avvenimenti sopra la peste*, Palermo, 1603, p. 59.

[9] Archives 99, fol. 69, Royal Malta Library.

[10] Ordinationi Capitulari, 1631, fol. 89t, manuscript in the possession of Chev. Jos. Galea, Mdina. *Malta Government Gazette*, 20th July 1923, p. 666; 12th November 1928, p. 800; 1st August 1930, p. 600.

[11] Sandys, G., *Sandys Travels*, London, 1673, p. 182.

[12] Semprini, G., 'Malta nella seconda metà del seicento', *Archivio Storico di Malta*, 1934, iv. 97.

The demand for prostitutes persisted down to the very end of the Order's rule in Malta. When they could not be obtained locally foreign sources were drawn upon so that it has been said that just as Sicily sent cargoes of ice to Malta it likewise sent cargoes of girls.[16] Sometimes the Grandmaster himself was not beyond reproach. Grandmaster Emanuel Pinto has been blamed for 'having afforded even up to the very time of death, which surprised him in the act at the age of ninety years, the most scandalous example of libertinage with loose women'.[17] In short, it has been said that a chaste knight was more rarely to be met with than a black swan.[18]

It was inevitable that the conduct of the knights should exercise a pernicious effect on the morals of the people. 'It may be safely concluded', says Coleridge, 'that the knights were little better than a perpetual influenza relaxing and diseasing the hearts of all the families within their sphere of influence.' The peasantry, being below their reach, escaped this corruption. 'Every respectable family had some one knight for their patron as a matter of course and to him the honour of a sister or a daughter was sacrificed equally as a matter of course . . . Alas! in nine instances out of ten this patron was the common paramour of every female in the family.'[19] A German visitor to Malta towards the last quarter of the eighteenth century made an almost identical pronouncement about the townsfolk who employed 'the basest and most abject means, even the beauty of their wives and daughters, to obtain protection, public places, pensions and presents' from the members of the Order.[20]

---

[13] Manuscript 429, Bandi 1744–1756, fol. 160, Royal Malta Library.

[14] Brydone, P., *A Tour through Sicily and Malta*, London, 1776, vol. i, p. 342.

[15] Dessoulavy, C. L., *op. cit.*, p. 104.

[16] *Ibid.*, p. 107.

[17] Doublet, P., *Mémoires historiques sur l'invasion et l'occupation de Malte*, Paris, 1883, p. 5.

[18] Seddall, H., *Malta Past and Present*, London, 1870, p. 125.

The official attitude was not indifferent to the evils of prostitution and legislative measures were devised to restrain and discourage it. Street women were not supposed to enter the Island while those resident were subjected to various social and legal disabilities. They were prohibited from opening their house door between sunset and sunrise and were forbidden from frequenting taverns and inns. The law drew a distinction, in awarding punishments to female offenders, according to whether the guilty person was an 'honest' woman or a street-woman. Thus where an 'honest' woman would be sentenced to the payment of a fine, a prostitute would be punished by flogging or exile for the same offence.[21] Widows leading a loose life forfeited any property bequeathed to them by their husbands while punishments were contemplated for anyone inducing girls and women to practise prostitution—a principle that received international recognition only in the present century when the International Convention for the Suppression of the White Slave Traffic was signed in Paris in May 1910.[22]

The reclamation of street-women was fostered by the Order's Government. The first man to turn his attention to this problem was Grandmaster Fra Martino Garzes who founded the Magdalen Asylum in 1595 for the reception of penitent women. This institution was entitled to receive the fifth part of the estate of every prostitute whose will was declared illegal and invalid unless containing a clause for such a legacy.[23] The direction of the asylum was entrusted to the nuns of St. Ursula. It remained in existence until 1798 when it was suppressed by the French. The British re-established it in the nineteenth century.[24]

Concurrently with these legal and social provisions, measures of a medical nature aimed at checking the spread of the disease were also taken. No exact distinction had been established between gonorrhoea and syphilis in the sixteenth and seventeenth centuries. Indeed the former illness was regarded by some as merely an advanced stage of the latter. The question as to the specificity and diversity of the two diseases was still being debated in the early decades of the nineteenth century. Colloquially the term 'pox' was used indiscriminately to indicate either disease. One of the earliest references regarding the 'pox' in Malta was made by a Frenchman who, writing anonymously in 1678, warned the unwary that there was no pox so virulent as that contracted in Malta; as the infection was brought to the Island by visitors from various countries he considered it to be 'un composé de toutes les veroles du monde'.[25]

---

[19] Coleridge, S. T., *The Friend*, London, 1866, p. 352.

[20] Dessoulavy, C. L., *op. cit.*, p. 104.

[21] *Del Dritto Municipale di Malta*, Malta, 1784, pp. 159, 182, 254, 258 and 276.

[22] *Malta Government Gazette Supplement*, 31st May 1918 and 1st August 1930.

[23] Julyan, P. G., *Report on the Civil Establishments of Malta*, London, 1880, p. 66.

[24] Ferres, A., 'Alcuni cenni sul sotterraneo ove si seppellivano le monache della Maddalena', *L'Arte*, 22nd January 1866, p. 7.

Sufferers from venereal diseases were provided with free mercurial treatment at the Holy Infirmary and at the Women's Hospital where *ad hoc* employees and wards were maintained. In the sixth decade of the eighteenth century Keiser's pills, the composition of which was kept a secret, were also being administered to luetic patients.[26] In 1762, spurred by the fact that '*ingenti ferocia turculenta lues grassari videatur*', Dr. Fortunato Antonio Cren, a physician in the Order's navy, wrote a Latin treatise on the 'American disease'. He explained its origin, described its manifestations and way of propagation. He condemned the employment of crude mercury in its treatment because of its dangers and recommended the oral use of corrosive sublimate dissolved in 'spiritus frumenti' to neutralise its injurious effects.[27]

Venereal patients tended to be ostracised. The view was held that the 'French disease' was an illness for which the patient was held totally responsible; for this reason, and also because of moral considerations, syphilitic women were debarred from admission to Santo Spirito Hospital and St. Julian's Hospital (Gozo) while infected sailors were not granted sick leave with pay as other mariners suffering from other forms of illness.[28] As late as 1826 venereal infection was qualified as a 'disgraceful or immoral disease' even by officialdom. As scabies was often associated with it, those most frequently affected being soldiers and convicts, the itch earned the same opprobrium as venereal disease.[29]

Periodical examination of prostitutes was introduced during the Order's domination. This practice was maintained during the first half of the nineteenth century. Until May 1832 they were examined at a place in Strada Tramontana, Valletta. Owing, however, to the 'indecencies' which occurred on the days that the Police Physicians visited these women, it was resolved to transfer the clinic to a room under the venereal wards of the Women's Hospital and to place a sentry round this hospital to disperse the individuals who collected there at all times of the day to taunt the women. At one time (1830) more than one hundred and sixty were being examined each month.[30] In 1859 it was found that this personal examina-

[25] Anonymous, *Nouvelle relation du voyage et description exacte de l'isle de Malthe*, Paris, 1679, p. 169.

[26] Cren, F. A., *Tractatus physico-medicus de Americana lue*, Malta, 1762, p. 60.

[27] Cren, F. A., *op. cit.*, pp. 69 *et seq.*

[28] *Del Dritto Municipale di Malta*, Malta, 1784, pp. 205 and 208.

[29] Permanent Committee 1st January 1816 to 31st December 1829, fols. 39, 119, 162 and 293, Medical & Health Archives, Valletta.

[30] Resolutions of the Permanent Committee 3rd March 1831 to 23rd June 1834, fol. 63. Charitable Institutions, Book No. 29, fols. 5, 167 and 310, Medical & Health Archives, Valletta.

tion was not sanctioned by law and the prostitutes, having learned that the medical inspection was merely a traditional measure, resisted further examinations and the practice had to be dropped. The consequences, however, soon became apparent especially among service men so that the government was induced to make provisions calculated to prevent the propagation of venereal disease. The result was the enactment of Ordinance IV of the 14th June 1861 which legalised the submission of prostitutes to a periodical medical inspection and ordered the compulsory treatment of infected ones in a special hospital where they were detained until they were cured. While these preventive measures were being enforced, it was felt that prostitution had not reached such magnitude as to call for any special measures for its suppression. In fact the number of known prostitutes at the middle of the nineteenth century did not exceed two hundred, a figure that was considered to be within 'normal proportions' especially when one took into account the Island's maritime position and the presence of a large garrison and numerous fleet. Syphilis was more commonly diagnosed among the poorer type of prostitutes who were almost exclusively patronised by soldiers and sailors. This accounted for the fact that syphilis was more frequent among service people than among civilians. The disease was very seldom met with among the more expensive and refined street women who were nearly all foreigners.[31]

The operation of the new law did not imply the official recognition of public prostitution or the licensing of street women but it only placed them under a certain degree of control with a view to preventing the consequences of neglected venereal affections. These diseases were thus timely diagnosed and treated. The Ordinance of 1861 had also the effect of checking the extent of prostitution apart from hindering the dissemination of disease. Those women who were averse to medical inspection emigrated to Alexandria and other eastern cities while girls who might have been inclined to take to the streets as a profession were deterred from so doing, so that by 1865 the number of prostitutes had fallen to 120, most of them, in the words of Sir F. V. Inglott, being 'without the least personal attraction and half idiotic'.[32] Whether their mental condition was the cause that drove them into the streets or whether it was the result of neurosyphilis we do not know.

Towards the close of the century the climate of opinion in England with regard to the control of venereal disease began to undergo a change. The principle that public health was the supreme law no longer held undisputed sway. Legislative measures on similar lines to the Maltese Ordinance of 1861 had been enforced in England and other countries but by 1886 opinion veered towards the opposite and the law was repealed in the United Kingdom on the grounds that it was arbitrary, immoral and unconstitutional. Many of the colonies followed suit. An attempt was made by the Secretary of State for the Colonies to repeal the Ordinance of 1861 in Malta but the opposition aroused was strong and unequivocal so that when the repeal was moved in the Council of Government on the 5th December 1888 it was rejected by the elected members. The reasons given by the Crown Advocate in support of the repeal were of a purely sentimental nature and quite unconvincing. He said that the aim was to release prostitutes from the humiliation of exposing their bodies for medical inspection and to put a stop to the violation of the personal liberty of these women who were forced to undergo treatment against their will.

---

[31] Miscellaneous Letters Issued from 7th January 1859 to 1st July 1867, fol. 472, Medical & Health Archives, Valletta.

[32] *Ibid.*

Far from approving the repeal of the Ordinance the general feeling was that the law was not stringent enough as it stood. The government was reminded that the Ordinance had been enacted principally for the protection of the health of Her Majesty's army and navy and that since prostitution and its consequences could not be stamped out, it was only fair that some control should be exercised to prevent these women from harming those who came in contact with them. It was argued that the existing law, apart from protecting public health, acted as a powerful deterrent to women who, were it not for the inconvenience of being subjected to inspection, would have sunk into moral degradation. The local press joined the people's representatives in the Council of Government in opposing the proposed repeal. The following extract from the *Public Opinion* of the 27th November 1888 gives an indication of the intensity of the reaction that was aroused: There 'is no reason why this Island should be converted into a pest house for the propagation of the foulest and most insidious diseases which undermine the health and the life, not only of the immediate sufferers but of innocent generations yet unborn'.[33] In face of this opposition the Ordinance of 1861 was left alone. Many years later it was re-enacted with amendments as the 'Venereal Diseases Ordinance' of 1920. The main provisions of the law of 1861 remained unchanged[34] as the new legislation was only meant to ensure stricter surveillance on clandestine prostitution.[35] It was substantially confirmed by Ordinance VII of 1930 which introduced a new measure making it a criminal offence knowingly to transmit venereal disease through sexual intercourse and to engage in occupations likely to spread the disease.[36] This Ordinance was repealed in the following year[37] against the advice of the Chief Government Medical Officer.[38]

---

[33] *Copies of Correspondence or Extracts therefrom relating to the repeal of Contagious Diseases Ordinances and Regulations in the Crown Colonies*, London, 1889, pp. 39–42.

[34] *Malta Government Gazette Supplement*, 21st May 1920, p. 149.

[35] Report of the Comptroller of Charitable Institutions for 1922–23, *Malta Government Gazette Supplement*, 1st February 1924, p. 108.

[36] *Malta Government Gazette Supplement*, 1st August 1930, p. 977.

[37] *Malta Government Gazette Supplement*, 29th July 1931, p. 949.

[38] Parliamentary Debates, Session 1932–33, Second Part, vol. xxii, Malta, 1935, p. 1751.

During the Second World War it again became necessary to re-establish some measure of control over the spread of venereal disease. Accordingly on the 31st August 1943 the 'Venereal Diseases (Treatment) Regulations' were enforced by His Excellency the Governor in virtue of the powers conferred on him by the Emergency Powers (Defence) Acts of 1939 and 1940. These regulations made it the duty of special practitioners, in certain circumstances, to furnish the Chief Government Medical Officer with particulars about the person from whom the patient suspected he had contracted the disease. They also empowered the Chief Government Medical Officer to require the person concerned to submit to a medical examination and to treatment if necessary.[39] In December 1948 these regulations were re-enacted as the 'Venereal Diseases (Treatment) Act' with the object of subjecting infected persons, known to be spreading the disease, to compulsory treatment and to detention in a hospital for such time as may appear to be necessary to prevent the spread of infection.

Thanks to these measures and to the strong restraining influence of the religious and moral upbringing of the mass of the people venereal diseases made no appreciable progress in these Islands. Dr. John Hennen stated that during his tenure of office as Head of the Medical Department of the Mediterranean in the third decade of the last century syphilis was not very prevalent among the troops in Malta.[40] Six months after the Ordinance of 1861 came into operation there was not a single case of venereal disease at the Malta Naval Hospital that had been contracted locally while previously forty beds were usually occupied by patients who had become infected in the Island.[41]

Syphilis was unknown in Gozo in the mid-century. That Island with a population of over 16,000 souls 'whose habits and social virtue are very remarkable' had no public women. This does not mean that sex played no part in their lives. In fact amorous adventures were by no means uncommon but any mischief arising therefrom was remedied by a hasty marriage—a circumstance that explained why illegitimate births and foundlings were of a rare occurrence in that Island.[42]

In his comments on the mortality statistics for 1874 the Chief Police Physician said that venereal diseases were not so prevalent in Malta as in other countries.[43] At the Imperial Social Hygiene Congress held in London in July 1929 both the Admiralty and the Air Ministry delegates remarked on the small proportion of venereal disease contracted by their personnel in Malta.[44] The same applies to the civilian population at the present time, the incidence of these diseases being extremely low and limited to a large extent to barmaids, labourers and seamen.[45] Free treatment is provided for merchant seamen in accordance with the International Agreement for the Treatment of Venereal Diseases in the Mercantile Marine (Brussels 1924) to which Malta is a signatory.

---

[39] *Malta Government Gazette*, 31st August 1943, p. 710.

[40] Hennen, J., *Sketches of the Medical Topography of the Mediterranean*, London, 1830, p. 610.

[41] *Copies of Correspondence or Extracts . . .*, p. 50.

[42] Miscellaneous Letters Issued from 7th January 1859 to 1st July 1867, fols. 472–478, Medical & Health Archives, Valletta.

[43] Ghio, A., *Report on the Mortality in Malta and Gozo for the year 1874*, Malta, 1875, p. 15.

THE LOCK HOSPITAL

Provision for the treatment of venereal diseases in hospital dates from the seventeenth century when a small building adjoining the Women's Hospital was set apart for the reception of female patients suffering from skin affections and the French disease.[46] This building became known as the '*falanga*'. In 1679 the Visiting Commissioners of the Holy Infirmary were dissatisfied with the arrangements at this place and proposed the setting up of a room inside the Holy Infirmary to replace the existing or old '*falanga*' for the treatment of luetic patients and those suffering from scabies and other 'contagious' diseases. Foreign lepers and cripples were also to be received here.[47] The new accommodation was ready in 1682. A special attendant was employed to look after the sick undergoing mercurial treatment.[48] By 1787 this annexe had grown into an irregularly shaped block situated at the back of the Great Ward of the Infirmary.[49] The new '*falanga*', as this annexe came to be called, had rooms for the treatment by mercurial inunction of both sexes and was also provided with facilities for the administration of hot-air baths. These arrangements consisted of a chamber in which a log fire was lighted to heat an overlying room where the patient lay. The number of patients under treatment in 1787 was three hundred and fifty-six of whom one hundred and ninety-three were foreigners; in the following year the number had fallen to two hundred and ninety-three, the foreigners amounting to one hundred and sixty.[50]

As it was then believed that anti-venereal therapy was harmful during the hot season, the '*falanga*' was closed down during the summer. All those who applied for mercurial treatment during autumn, winter and spring were admitted but before presenting themselves for treatment they were examined by the Principal Physician and the Principal Surgeon. Those who were found suffering only from a 'simple gonorrhoea' were not treated as in-patients. Married men were also refused treatment unless they proved that their wives had been admitted to the Women's Hospital for anti-luetic treatment and unless they submitted a certificate

[44] *Malta Government Gazette Supplement*, 28th October 1930, p. 1179.

[45] *Report on the Health Conditions of the Maltese Islands for the year 1951*, p. 44.

[46] Manuscript Treasury B, No. 307D, fol. 243, Royal Malta Library.

[47] Archives 262, fol. 86t and 97t, Royal Malta Library.

[48] Archives 1713, fols. 8 and 19, Royal Malta Library.

[49] Manuscript 142, vol. 6, fol. 344, Royal Malta Library.

[50] Archives 6498G, no pagination, Royal Malta Library.

from the Episcopal Curia showing that they 'were keeping separate beds'.

The Principal Surgeon was immediately in charge of the patients but the Principal Physician had to pay them a visit, at least once a week, depending on the stage of treatment. Members of the Order, however, were visited daily by the Principal Physician irrespective of the kind of therapy they were receiving. A barber-surgeon had the duty of writing the patient's history and noting the type of treatment administered. The mercury inunctions were carried out by convicts or Christian slaves who received a 'tari' (about two pence) a day, three white loaves and a small measure of wine.[51]

With the passage of time the dangers of mercurial treatment became apparent. In fact it was observed that the patients who underwent the '*grandes remèdes*' were in a worse condition on leaving the '*falanga*' than before. This was due to the overcrowding of the beds on account of which each 'patient absorbed the volatile particles of mercury administered to his neighbour' as a result of which each patient received a higher dose of mercury than was good for him. A stricter medical supervision was advocated but this was not enough for in 1776 a greater danger arose from the 'foul exhalations' emanating from the '*falanga*' which permeated the wards of the Infirmary. This induced the Chapter General of the Order to propose the transfer of the '*falanga*' to a more suitable place in the hospital and the conversion of the evacuated rooms into wards for the reception of patients affected with scabies, ringworm and tuberculosis. No such step was ever taken but an attempt was made to cut off the '*falanga*' completely from the Great Ward by the walling up of windows and the erection of a divisional wall.[52] These structural alterations did not improve matters so that when the Infirmary and the '*falanga*' were taken over by Napoleon for his troops in 1798, the Chief Military Physician caused the two buildings to be reconnected with one another in order to improve their ventilation. The '*falanga*' was no longer used for venereal patients who were transferred to an emergency hospital set up in the Anglo-Bavarian Auberge at Valletta. When the Island passed into British hands at the beginning of the nineteenth century the Anglo-Bavarian Auberge was closed down as a venereal hospital and for many years afterwards no *ad hoc* institution was available for the treatment of luetic patients.

With the promulgation of the 1861 Ordinance, however, the establishment of a Lock Hospital became necessary. No separate institution was set up but a small detached pavilion of the Central Hospital was fitted up as a Lock Hospital. It consisted of two wards, kept under lock and key, capable of accommodating thirty patients at one time. Administratively it formed part of the Female Surgical Subdivision of the Central Hospital and was under the charge of the medical staff of that subdivision. Patients were not discharged until they were cured while breaches of discipline or acts of insubordination on their part were dealt with by the Court of Magistrates.[53] In March 1882 an attempt was made to transfer the Lock patients to the Ospizio in order to increase the accommodation of the Central Hospital[54] but it was not until April 1910 that the patients were removed to the Poor House at Mghieret.[55] Here they remained until 1931 when the Lock Wards fell into disuse following the repeal of Ordinance VII of 1930.[56] In the meantime, however, a Venereal Diseases Clinic was opened in March 1926 for the voluntary treatment of out- and in-patients at the Central Hospital.[57]

---

[51] Archives 1714, fols. 147 and 204, Royal Malta Library.

[52] Archives 309, fol. 157, Royal Malta Library.

[53] Register of References to the Comptroller of Charitable Institutions, vol. ix, fol. 62, Medical & Health Archives, Valletta.

[54] Letters to Government from 1st July 1878 to 22nd March 1883, fol. 436, Medical & Health Archives, Valletta.

[55] Galea, A. M., *Il Carità f'Malta u Ghaudex*, Malta, 1912, p. 34.

[56] Parliamentary Debates etc., p. 1751.

[57] *Malta Government Gazette Supplement*, 7th July 1927, p. 941.

CHAPTER 23

Trachoma

THOUGH it is not known when trachoma was first imported into these Islands, there is sufficient evidence to show that eye diseases were common in the past. Quintinus, the author of the earliest description of Malta to be printed, remarked in 1533 that the dust raised by the wind in summer from the rocky terrain of the Islands had a deleterious effect on the eyes of the inhabitants.[1] Jean Thevenot, who was in Malta in 1655, noted that many of the knights wore sun-glasses[2] while more than a hundred years later an English traveller recorded that many of the residents of Valletta were 'remarkably weak-sighted'—an occurrence which he, too, attributed to the glare arising from the white free-stone with which the streets were paved and which he found very offensive to the eyes.[3] Boisgelin made a similar observation thirty years afterwards. The wearing of sun-glasses had extended from the knights to the Maltese with the advance of the eighteenth century 'for such is the excessive heat', he says, 'occasioned by the reverberation of the rays of the sun from the stones and the white tufa that, notwithstanding this precaution there are many blind people; indeed the greatest number have weak eyes'.[4]

The incidence of blindness was also ascribed to the night dews to which many of the inhabitants exposed themselves through their habit of sleeping in the open air. In popular opinion the ripening of pomegranates in the autumn and the prevalence of eye diseases in the same season stood to each other in the relation of cause and effect. Blindness was especially prevalent among the many beggars that infested the streets at the dawn of the nineteenth century.[5] Although the earliest mention of the existence of trachoma in Malta occurs in 1885[6] there is hardly any doubt that much of this blindness was the late result of trachomatous infection which was then highly prevalent in the neighbouring shores of the Mediterranean and which is known to be attended by more loss of vision than any other ocular affection.

---

[1] Quintinus, G., *Descrittione dell'isola di Malta*, Venice, 1545, p. 79.

[2] Dessoulavy, C. L., 'Visitors to Malta from the 15th to the 18th Century', *The Sundial*, 1940, iii. 103.

[3] Brydone, P., *A Tour through Sicily and Malta*, London, 1776, vol. i, p. 346.

[4] De Boisgelin, L., *Ancient and Modern Malta*, London, 1805, vol. i, p. 78.

[5] Anderson, A., *A Journal of the Forces*, London, 1802, p. 182.

[6] Manché, L., *Ottalmologia in quadri sinottici*, Malta, 1885, no pagination, Quadro IX.

Official concern with eye diseases dates from the early decades of the nineteenth century. Inflammatory conditions of the eyes, from whatever cause, were in those days referred to by the medical profession, both in Malta and abroad, as 'ophthalmia'—no distinction being made between the various inflammatory diseases of the eyes. The Permanent Committee set up by Sir Thomas Maitland in January 1816 to superintend the management of the Charitable Institutions were impressed by the great number of persons seeking admission for ocular diseases into the Civil Hospitals at Valletta and in November 1817 they proposed the setting up of an *ad hoc* Ophthalmic Ward in the Hospital for Men. The government approved their suggestion and the new ward was entrusted to a Mr. Charles Tucker who had 'kindly volunteered his assistance and advice' in all ophthalmic cases and who later became Deputy Inspector of Hospitals.[7]

Admissions for 'ophthalmia' to the Civil Hospital from 1821 to 1833 numbered 324 representing a proportion of one to every twenty-seven admissions so that there were more than ten to twelve patients under treatment at one time. These figures give only an approximate indication of the incidence of eye diseases at this period for hospital treatment was requested only when the disease was much advanced; before it reached such a stage it was either neglected altogether or else treated with the folk remedies then in vogue. Women and children belonging to the poorer classes were among its most frequent victims. No part of the Island was exempt but there were villages which were affected more than others. In the early years of the nineteenth century Zejtun was notorious for the number of its inhabitants who suffered from eye diseases and for the number of blind people. Indeed the great majority of blind street musicians who performed in the streets of Valletta came from this village. In 1823 all ninety pupils attending the village school were afflicted with ocular diseases.[8] 'Ophthalmia' was not, however, an exclusively civilian disease. It was also rife among the troops. Of 19,360 admissions to Military Hospitals between 1816 and 1823 no less than 1,463 were eye cases, this figure ranking next to that of 'continuous fever' (2,937) and of 'ulcus' (1,890).[9]

Among ocular conditions in the last decade of the century, trachoma, complicated with corneal lesions and trichiasis, was still the predominant disease both in the towns and the villages not only among the poor but also among the well-to-do. In spite of the increase in the Island's population with consequent augmentation in the incidence of eye diseases, the number of beds for eye cases in 1890 was not more than fifteen which worked out at the rate of one bed for every ten thousand persons; treatment was, however, also available at the Government Dispensaries under the District Medical Officers.[10] By the end of the century it was realised that a campaign on the part of the public health authorities was needed to stem the propagation of such a highly contagious disease by teaching the people how to protect themselves through cleanliness and the avoidance of the use in common of linen and toilet utensils. The medical inspection of school children and the establishment of free ophthalmic out-patient clinics was also advocated.[11] Individual efforts in the fight against trachoma were not wanting. The pioneer was Dr. Lawrence Manché who, after his retirement as Ophthalmic Surgeon from the Central Hospital, on reaching the age limit, founded an Ophthalmic Institute at Hamrun where he treated many trachomatous patients free of charge. In his endeavours he was assisted by his son Dr. Charles Manché.[12]

---

[7] Letters of the Permanent Committee of 1st January 1816 to 31st December 1829, fols. 47, 49 and 56, Medical & Health Archives, Valletta.

[8] Hennen, J., *Sketches of the Medical Topography of the Mediterranean*, London, 1830, pp. 494–498.

[9] Hennen, J., *op. cit.*, pp. 661–666.

At this period serious attempts were being made in Italy and Sicily to check the dissemination of trachoma which was then very common among the poorer section of the population. Italian oculists organised a National League against trachoma of which the first congress was held at Palermo in April 1906. A number of public health measures aimed at the extirpation of the disease were submitted to the Italian Government.[13] Inspired by these efforts, Dr. Charles Manché urged upon the Maltese Government the adoption of similar provisions to check the progress of the disease in Malta and pointed out that public health measures against trachoma had already been taken in Germany and America. Statistical data published by him in 1909 showed that the disease was very widespread. The number of conjunctival affections seen at his private clinic was 72 per cent of the total number of ocular diseases treated while trachomatous cases formed 62 per cent of all the conjunctival diseases under his care.[14]

The social and economic handicaps of the disease were first experienced on a large scale during the First World War when many otherwise healthy young men were rejected from military service in the Maltese contingent raised for the Salonika campaign; but it was not until the close of the first quarter of the century that the full significance of the consequences of trachoma loomed large in the public eye.[15] This was at a time when emigration was being encouraged to afford some relief to an increasing population. It was then realised that trachoma formed a very serious bar to this migratory movement for several countries, such as England and the United States of America, refused to take emigrants suffering from this disease. Another circumstance that helped to focus attention on trachoma was the unexpected influx of hundreds of Tripoli refugees full of trachoma who flocked to Malta during the Italo-Turkish War of 1911.

---

[10] Cassar, S., *Rendiconto degli ammalati ammessi durante il biennio 1890–91. Comparto ottalmico dell'Ospedale Centrale.* Malta, 1891, p. 1.

[11] Cassar, S., *op. cit.*, p. 5. Norsa, G., *Le malattie oculari in Malta*, Roma, 1899, pp. 14–15.

[12] Preziosi, L., *La profilassi del tracoma*, Malta, 1928, p. 8.

[13] Manché, C., 'Some Notes upon Granular Conjunctivitis or Trachoma', *The Ophthalmoscope*, August, 1907.

[14] Manché, C., *Annual Statistical Report of the Eye Diseases Treated at the Ophthalmic Institute of Malta from July 1908 to July 1909*, Malta, 1909, p. 12.

[15] Preziosi, L., *op. cit.*, p. 9.

The Comptroller of Charitable Institutions had tried to persuade the government to grant some extra remuneration to the ophthalmic surgeon at the Central Hospital to enable him to go round in the villages and assist the District Medical Officers in their fight against the disease but he complained with the Royal Commissioners of 1912 that whenever it came to proposing anything it had to be held back because of the question of funds. The official precautions taken against the diffusion of trachoma at this period concerned the children attending the Government Elementary Schools. A set of instructions aiming at the prevention of its spread was prepared by the Public Health Office and adopted in these schools.[16] When a child was observed to have some slight secretion from the eyes it was sent to the District Medical Officer who examined the child and undertook its treatment if it was found to be suffering from trachoma. Though by the first decade of the century it had become clear that the illness was of an infectious character and that its spread was intimately associated with filth, overcrowding and poverty, not enough was known about the nature of the infecting agent to enable the sanitary authorities to adopt more effective steps against it.[17]

In 1923 the 'Camera Medica' suggested the establishment of an institution where trachomatous children could be given elementary schooling while undergoing treatment. This proposal was not carried into effect but the government took active steps in other directions to eradicate the disease.[18] These comprised, apart from the notification of trachoma in August 1922, the examination of all Government Elementary Schoolchildren by the District Medical Officers and by an eye specialist, the provision of District Nurses to carry out treatment, the granting of small money bonuses to parents of children who reported regularly for treatment, the free treatment of trachomatous individuals at all Government Dispensaries and the publication of leaflets in Maltese regarding the precautions to be taken against contracting the disease.

A change for the better and a gradual disappearance of the more severe forms of trachoma became noticeable in the following years but the incidence of the disease in 1929 in Malta and Gozo was still estimated to be 0·5 per cent and 1 per cent respectively, the infection being commonest among children below the age of fifteen years living in poor overcrowded households.[19] With the intention of intensifying the campaign against the disease, a Trachoma Committee was appointed by the Minister for Public Health in 1928. This committee stressed the important part that such social factors as poverty, underfeeding, overcrowding and deficient personal and domestic cleanliness played in the transmission of the infection. They, therefore, suggested among other measures an amelioration of the housing conditions of that class of people among whom trachoma was prevalent, the provision of an adequate supply of water for the poorer families, the examination of contacts, the institution of a Trachoma Board to secure uniformity of diagnosis and to supervise treatment, and increased hospital accommodation for those suffering from the disease.[20] The last two recommendations were implemented immediately. A Trachoma Board was set up in the following year and a hospital building at 'L-Ibrag', Victoria (Gozo), originally intended for tuberculous patients, was temporarily adapted in July 1929 for the treatment of trachomatous children. Two trachoma wards were established in August of the same year at the Poor House at Malta.[21]

---

[16] *Report of the Chief Government Medical Officer and Superintendent of Public Health for 1922*, p. 8.

[17] *Royal Commission of 1912, Minutes of Evidence, Cd. 6280*, pp. 22 and 163.

[18] Preziosi, L., *op. cit.*, pp. 9–11.

In June 1948 a vigorous anti-trachoma attack was launched by the government in the Island of Gozo where a few decades earlier it was the exception to find a family free from the disease.[22] All primary schoolchildren and their contacts, together with a large section of the general population, were examined and treated with very good results;[23] in fact while in 1948 the number of trachomatous children among those attending school was 16 per cent the incidence went down to 4 per cent by 1953.[24] At this period the number of new cases in Malta was only forty-two out of a general population of over 286,000—a figure that contrasts markedly with that obtaining twenty years earlier when three hundred and seventy-four cases were reported out of an estimated population of over 223,000.[25] Trachoma has now ceased to be the serious problem that it was in the past; but, although the disease is well under control, the fight against it still goes on.[26]

[19] *Report on the Health of the Maltese Islands during 1928*, p. iii. *Report on the Health of the Maltese Islands during 1932*, pp. v and lxviii.

[20] *Report on the Health of the Maltese Islands during 1928*, pp. liii to lv.

[21] *Report of the Comptroller of Charitable Institutions for 1929–30*, p. viii. *Report on the Health of the Maltese Islands during 1929*, p. v.

[22] *Report on the Health Conditions of the Maltese Islands for the year 1953*, p. 29.

[23] Tabone, V., 'Anti-Trachoma Campaign in Gozo', *British Medical Journal*, i. 738.

[24] *Report on the Health Conditions of the Maltese Islands for the year 1952*, p. 26.

[25] *Report on the Health of the Maltese Islands during 1932*, p. v. *Report on the Health Conditions of the Maltese Islands for the year 1952*, p. 25.

[26] *Report on the Health Conditions of the Maltese Islands for the year 1953*, p. 30. *Report on the Health Conditions of the Maltese Islands for the year 1957*, p. 34.

CHAPTER 24

Brucellosis

WHAT constitutes, perhaps, the earliest reference to this illness in Malta is to be found in an account of the island written in the late sixteenth century by Giovanni Battista Leoni. Leoni was an ecclesiastic from Venice who accompanied Mgr. Gaspare Visconti on his visit to Malta in 1581 to inquire into the causes of the internal dissensions that were agitating the Order at the time of Grandmaster Jean de la Cassière. Some time after his arrival in Malta Mgr. Visconti contracted a grave and prolonged fever which had 'certain capricious intermissions' by which one was never sure whether he had recovered or was still sick and which the doctors called 'erratic fever'.[1] Leoni further informs us that the fever was accompanied by an 'uncomfortable obstruction of the spleen', apparently an allusion to the enlargement of this organ (which is one of the cardinal signs of brucellosis) and to the pain and tenderness produced by the perisplenitis which is also of common occurrence.

For almost three hundred years this type of fever continued to prevail undifferentiated from other 'intermittent' and 'remittent' fevers until the second half of the nineteenth century when its protracted course and disabling effects among the British troops began to engage the attention of the military authorities. It was then known as bilious or gastric or Mediterranean fever. The first detailed description of it was that written in 1860, under the name of 'Mediterranean Remittent [or] Gastric Remittent Fever' by Dr. J. A. Marston who was then serving as an Army Assistant Surgeon in Malta and who himself suffered from it. He had no doubt that his account was accurate and exact for, he says, 'the patient was myself, the description reads anything but an exaggerated one of what I felt at the time'.[2] Further papers were published by various service doctors[3] among which is an extensive monograph by Dr. M. L. Hughes who also contracted the disease.[4]

Various factors were blamed for its occurrence. 'Miasma' arising from the marshes of Sicily and Africa was held responsible for its development. Another hypothesis attributed the illness to an alteration of the blood produced by gastric and liver disturbances. The 'humid exhalations' arising from the sea were also incriminated.[5] The microbe causing the disease was discovered by Surgeon Major (later Sir) David Bruce while he was working at the Station Hospital of Valletta in December 1886. He found the micrococcus in the spleen of five fatal cases of undulant fever, as it was also called.[6] In May 1887, in conjunction with Dr. G. Caruana Scicluna, Bruce tried to cultivate the organism from blood taken from the fingers of ten patients suffering from the disease but his efforts were not rewarded with success. When, however, one of the cases proved fatal, inoculations were made into eight agar-agar tubes and colonies of the micro-organism appeared in all the tubes.[7] In April 1888 he reported the results of the inoculation of the cultivated organism into several species of animals and described in great detail the microscopical and cultural characters of the microbe, which was subsequently isolated by Surgeon Gipps, R.N., who, though working in Bruce's laboratory, did not appear to have placed much confidence in its causal connection with the disease. Hughes also isolated it in 1896. He inoculated monkeys with the organism and a pyrexial condition analogous to the fever in man was set up. Furthermore he recovered the microbe from these animals after death and injected it in other healthy monkeys in whom he produced similar manifestations. He called the organism '*Streptococcus melitensis*' (1892) but subsequently renamed it '*Micrococcus melitensis* vel *Brucii*'.[8] Though Bruce's discovery was thus amply confirmed, no one had any idea as to the source of the microbe or the route of infection. Bruce blamed the insanitary state of the barracks for the occurrence and spread of the fever and was convinced that its disappearance depended on the provision of healthy housing conditions. Hughes ascribed it to faecal contamination of soil and air by persons suffering from the fever, to escape of sewer gas from drain ventilators and to inadequate ventilation of rooms. While the majority of service and civilian doctors in Malta held similar views a solitary voice—that of Surgeon Major Tidbury, A.M.S.—suggested that the germ was drunk with water and milk;[9] but while the water theory received considerable attention the possibility of milk being the vehicle of infection was ruled out. Hughes thought that the disease had no causal connection with the intake of milk or food and stated that he met no fact that would favour a causal connection between milk supply and this fever.[10] On another occasion he did not hesitate to attribute an outbreak of this fever in a military hospital to a leaking drain pipe and to say that 'the milk supply was above suspicion' although he did not state on what grounds the milk supply was acquitted.[11]

---

[1] Falcone, P., 'Una relazione di Malta sulla fine del cinquecento', *Archivio Storico di Malta*, 1934, iv. 16.

[2] Marston, J. A., 'Report on Fever (Malta)', *Army Medical Department Medical Report for 1861*, London, 1863, vol. iii, pp. 520–1.

[3] Hughes, M. L., 'Note on the Endemic Fever of the Mediterranean', *Medico-Chirurgical Transactions*, 1896, xxix. 209.

[4] Hughes, M. L., *Mediterranean, Malta or Undulant Fever*, London, 1897, p. ii.

---

[5] *Il Barth*, 25th July 1871, p. 1.

[6] Bruce, D., 'Note on the Discovery of a Micro-organism in Malta Fever', *The Practitioner*, 1887, xxxix. 163.

[7] Hughes, M. L., 'Note on the Endemic Fever . . .', p. 25.

[8] Hughes, M. L., 'The Natural History of Certain Fevers Occurring in the Mediterranean', *The Mediterranean Naturalist*, 1892, ii. 325. Hughes, M. L., *Mediterranean, Malta or Undulant Fever . . .*, p. 42.

[9] *Records of the Malta Branch of the British Medical Association, 1888–1917*, meeting of 16th May 1894.

Recognition of the disease was made easier in May 1899 when Dr. (later Sir) Themistocles Zammit applied Widal's method to the serum diagnosis of the fever and demonstrated the microscopic coagulation of the Bruce micrococcus when treated by the blood serum taken from a patient suffering from the disease.[12] The prevention of the illness, however, still remained a grave problem for as long as the source of the micrococcus was unknown no prophylactic measures could be devised. The army and the navy were equally interested as, through its prolonged course and high invaliding rate, this fever was seriously undermining the strength of the twenty-five thousand soldiers and sailors of the Mediterranean garrison. In fact in 1891 it was calculated that the Malta garrison was costing the State, on account of this disease alone, an expense equal to that of a whole regiment one thousand strong in hospital for twenty-five days.[13] Among civilians the average number of cases per year was 3·2 per thousand of the estimated mean population at about the same period.[14]

The military authorities finally took action as the incidence of the fever reached the alarming figure of 25·6 cases per thousand per annum among the garrison. The Royal Society, at the request of the Admiralty, War Office and the Colonial Office undertook its investigation and sent out a joint commission to Malta for that purpose representing the army, navy and the Malta civil government. The Commission, of which Col. David Bruce and the Maltese physician Dr. Themistocles Zammit formed part, worked very hard from 1904 to 1906. It was shown that the principal path by which the micrococcus left the body was by way of the urine and many experiments were carried out to determine whether the excretion of the microbe in the urine was a factor in the spread of the disease. Diligent search was made in an effort to discover the microbe in sewer air, dust and water. Numerous experiments with mosquitoes and other blood-sucking insects proved that these vectors played no prominent role in the transmission of the illness. The sea water of the Grand Harbour was studied bacteriologically for the possible presence of the micrococcus while the possibility of the spread of the disease by contact was also investigated; however, in spite of all this labour the source of the microbe continued to elude them.

---

[10] Hughes, M. L., *Mediterranean, Malta or Undulant Fever . . .*, p. 52.

[11] Hughes, M. L., 'Note on the Endemic Fever . . .', p. 33.

[12] *Records of the Malta Branch of the British Medical Association, 1888–1917*, meeting of 19th May 1899.

[13] Hughes, M. L., 'Note on the Endemic Fever . . .', p. 45.

[14] Zammit, T., 'Undulant Fever in the Goat in Malta', *The Annals of Tropical Medicine and Parasitology*, 1922, xvi. 1.

The investigations had started to become tedious and unrewarding when the discovery that the goat was the reservoir of the micrococcus was made quite accidentally. Various animals had been examined—monkeys, rabbits and guinea-pigs—to determine whether they were liable to contract the disease. The need for other kinds of laboratory animals induced the Commission to experiment on goats which then used to be conducted through the streets of the towns and villages to be milked at the doorstep of the consumer. It must be noted that Mr. A. M. Macfarlane, the Government Veterinary Surgeon, had already suggested in 1901 that the goat was the reservoir of the microbe.[15] Zammit came to the same conclusion early in 1905 when he informed the Chairman of the Commission accordingly.[16] The Commission, however, was sceptical about the outcome of research on these lines. 'It must be confessed', says Bruce, 'that the Commission had little hope that an examination of these animals would yield anything. As a matter of routine several goats were inoculated with the micrococcus and the result watched. There was no rise of temperature, no sign of ill-health in any way, but in a week or two the blood was found to be capable of agglutinating the specific micro-organism. Even then the goat seemed such an unlikely subject for Malta fever that the observation was in danger of lapsing. Nothing more was done for several months when by accident the matter came up again and it was decided to repeat the inoculation experiments.' A small herd was procured for the purpose and their blood was examined before inoculation as an ordinary precautionary measure. Much to the surprise of the Commission several of them were found to react naturally to the agglutination test and this led to the examination and the discovery of the micrococcus in the blood, urine and milk.[17] The actual discovery of the organism in the blood of the goat was made by Zammit who thus describes it: 'On June 18th [1905] about 5cc of blood were taken from goat No. 6 and distributed in six broth tubes. On June 25th passages from the broth tubes were made on to agar slopes and the *Micrococcus melitensis* recovered in pure culture. This micro-organism was also recovered from the blood of goat No. 5.'[18]

Zammit's discovery was soon confirmed by an unpremeditated experiment on human beings. In the summer of 1905 Mr. Thompson of the United States Bureau of Animal Industry obtained a herd of sixty-five goats from Malta and shipped them to America via Antwerp on the S.S. *Joshua Nicholson* on the 19th August 1905. During the voyage many of the ship's company partook freely of the goats' milk. On arrival at Antwerp the goats were re-embarked on the S.S. *St. Andrew* and again during the passage to New York a large quantity of milk was consumed by the crew. Practically everyone on the *Joshua Nicholson* who drank the milk developed undulant fever while bacteriological examination of the milk of several of the goats that reached America resulted in the recovery of the micrococcus.[19] A further important contribution to the diagnosis of the disease in the goat was made by Zammit on the 10th July 1905 when he observed that the agglutination test could be applied to the milk of goats as well as to their blood—an observation that greatly facilitated the examination of large numbers of goats.[20] The method developed by him is now known as Zammit's Test.

---

[15] *Royal Commission of 1912, Minutes of Evidence, Cd. 6280*, p. 197.

[16] *Reports of the Commission for the Investigation of Mediterranean Fever, Part III*, London, 1905, p. 4.

[17] Bruce, D., 'Researches into Epidemiology of Malta Fever', paper read before the Epidemiological Society, 15th February 1907.

[18] *Reports of the Commission for the Investigation . . ., Part III*, p. 83.

Having solved the enigma of the source of undulant fever, the Commission henceforth devoted all its efforts to the devising of preventive measures against the disease which between 1894 and 1903 had caused a mortality of 8·9 per cent of cases attacked among the civilian population. Suspicions had gained some ground that undulant fever could be transmitted through sexual intercourse and this led to the carrying out of a good deal of bacteriological investigations on prostitutes. Blood samples, vaginal swabbings and specimens of urine were examined and the conclusion was reached that though infection with the *Micrococcus melitensis* was possible during sexual intercourse, its occurrence was rare.[21] Milk was obviously the main vehicle of infection and to this source the Commission directed practically all its attention. They proved, in 1905, that pasteurisation destroys the microbe in infected milk. Sterilisation of milk was carried out at Bighi Naval Hospital from the 9th April 1906 onwards but as doubts arose regarding the efficiency of the process in barracks and hospitals, an order was issued in May 1906 for the discontinuance of the supply of goats' milk to the military hospitals. In the following months the garrison also changed over from goats' milk to condensed milk.[22] This measure was attended by exceedingly satisfactory results among servicemen and cases of undulant fever among them practically disappeared. 'Undulant fever', it was said, 'has been actually stamped out in the Service as if by magic; but the magician's wand that waved over Malta and purged it of undulant fever was naught but a tin-opener for the substitution of tinned milk for goats' milk stopped the spread of the disease at once.'[23]

Warnings to the civilian population regarding the dangers arising out of the drinking of goats' milk were sounded in 1905 through the distribution of a pamphlet issued by the Public Health Department, articles in the press and announcements by the clergy. The boiling of milk had, so far, been considered superfluous by the people because it was known that the Maltese goat did not suffer naturally from tuberculosis against which the precaution of boiling had been advocated abroad; but now great emphasis was laid on this simple yet effective measure.

---

[19] Caruana Scicluna, G., *The Milch Goat*, Malta, 1906, p. 6. *Reports of the Commission for the Investigation . . ., Part VI*, p. 70 and *Part VII*, p. 107.

[20] *Ibid., Part IV*, p. 97.

[21] *Ibid., Part VI*, pp. 107 and 132.

[22] *Ibid., Part VII*, pp. 172–3.

[23] Ritchie, M. B. H., *Melita Effulgens*, Malta, 1926, p. 5.

The Commission recommended the following preventive steps: (a) the compulsory notification of Mediterranean fever by naval, military and civil authorities to a central office, (b) the prohibition of the entry of goats into Valletta and other towns, (c) the establishment of small laboratories in various parts of the countryside for the examination of all goats by means of Zammit Test, (d) the slaughtering of infected goats, (e) the milking of goats under the supervision of the Public Health Department, and (f) instructing the public to boil the milk before drinking it.[24] It was envisaged that the carrying out of these measures was no easy task and that much prejudice and opposition had to be overcome both on the part of the goatherds and of the public. How very true this turned out to be is shown by the fact that for years afterwards the belief still persisted that the fever had no connection with goats' milk and that it was due to the inhalation of infected dust, especially that derived from the digging up of the subsoil and throwing open the roads to lay down pipes for the water supply and drainage. The Royal Commission of 1912 was told that the sanitary authorities blamed the goat for the spread of undulant fever in order to have an excuse for destroying the goats with the aim of ruining the goatmen.[25]

Following the implementation of several of the recommendations of the Commission,[26] a drop in the prevalence of the fever cases among civilians was registered but in spite of the slaughter of hundreds of goats a year (as many as one thousand in two years) the incidence of the disease did not diminish as much as it had been expected. It is true that by 1914 the rate of attack had gone down to 15·5 per ten thousand while for the period 1897–1907 it had averaged 34 per ten thousand but the recommendation to boil the milk, insisted upon by the Public Health Department year after year, was not given the serious consideration it deserved by the public.[27] By the early twenties it had become obvious that the slaughtering of goats and the constant appeals to boil the milk before consumption had produced no appreciable diminution in the incidence of undulant fever; on the contrary it went on increasing until it reached the highest peak since 1897.

In the Valletta and Cottonera Military Hospitals milk was being pasteurised in Aymard sterilisers as early as 1904.[28] The idea of pasteurising milk for sale to the public was put forward in 1922 and again in 1923. This question was also raised by the Undulant Fever Committee in the same years and, later on, by the Chief Government Medical Officer. A committee was appointed by the government to consider the desirability and feasibility of introducing a supply of pasteurised goats' milk in the Island. This committee, reporting in February 1932, unanimously recommended the establishment of a station for milk pasteurisation by the government. They made it clear that the scheme was intended as a prophylactic measure against disease and that in considering its financial aspect the fact that the hospital treatment of undulant fever patients had cost the government at least £4,500 during 1930–31 was not to be lost sight of.[29] Meanwhile (1934) a Goat Immunisation Scheme had been inaugurated in the hope of protecting goats against the infection by means of vaccination but in spite of the work done no progress towards satisfactory immunisation was made.[30] Pasteurisation could, therefore, no longer be delayed; the recommendations made in 1932 by the Committee on Pasteurisation of Goats' Milk received the sanction of the government and on the 11th May 1938 the Milk Pasteurisation Centre was inaugurated. Milch animals were prohibited from entering Valletta and the sale of goats' milk forbidden from the 1st February 1939. Since then the disease has been on the decrease, having practically disappeared during the war years when many goats were slaughtered to provide meat for a starving population;[31] as the banning of the sale of raw milk was extended to the whole of Malta in April 1957, the incidence of cases fell to sixty-nine by 1963. In Gozo the sale of raw milk was prohibited in March 1964.

---

[24] *Reports of the Commission for the Investigation . . ., Part VI*, p. 133 and *Part VII*, p. 260.

[25] *Royal Commission of 1912, Minutes of Evidence, Cd. 6280*, pp. 329 and 387.

[26] *Malta Government Gazette*, 21st June 1909, p. 611.

[27] *Report on the Public Health Department for 1913–14*, p. 318. *Report on the Public Health Department for 1914–15*, p. 185.

[28] *Reports of the Commission for the Investigation . . ., Part VII*, p. 169.

The choice of a suitable name for this malady proved to be a difficult and controversial question. Many names were suggested. Bruce referred to it as 'Malta Fever' but Hughes preferred to call it 'Mediterranean Fever' or better still 'Undulant Fever'. He considered it unfair to saddle Malta with the responsibility of a fever by no means peculiar to the Island. A similar opinion had been voiced as early as 1868 by another British physician, who in making use of the term 'Maltese Fever' admitted that 'the propriety of thus locating the disease' was very questionable.[32] Staff Surgeon G. Kirker, R.N., speaking at a meeting of the Malta Branch of the British Medical Association on the 16th May 1894, proposed that the name of 'Malta Fever' should be abandoned as the fever was not specific to Malta.[33] Indeed the disease prevailed (as it still does) in many countries bordering on the Mediterranean and even in more distant places such as America and China. The designation of 'Malta Fever' was also misleading as before Bruce's discovery of the micrococcus the term was applied to a pyrexia with sudden onset but short duration which was later known as phlebotomus fever.[34]

---

[29] *Report on the Health of the Maltese Islands during 1932*, Appendix R, Malta, 1933.

[30] Zammit, T. and Debono, J. E., 'Immunization of the Maltese Goat', *The Lancet*, 1933, i. 134. 'First Progress Report of the Undulant Fever Committee', *Malta Government Gazette Supplement*, 18th May 1937, p. 541.

[31] *Report on the Health Conditions of the Maltese Islands for the year 1946*, p. ix.

[32] Boileau, J. P. H., 'Remarks on Fever in Malta with Cases', *Army Medical Department Report for the Year 1866*, London, 1868, viii. p. 478.

[33] *Records of the Malta Branch of the British Medical Association, 1888–1917*, meeting of 16th May 1894.

In spite of these objections the term 'Malta Fever' remained in general use. On several occasions the Government of Malta made representations on the subject. To these was later added a memorandum addressed to foreign colleagues by the Maltese medical profession pleading for the discontinuance of the term and for the adoption of the name 'Undulant Fever' first proposed by Hughes in 1897 and subsequently upheld by the International Congress of Medicine held in London in 1913. The question was again raised in 1932 by the Malta Government delegate at the First International Congress of Mediterranean Hygiene[35] but the abandonment of the term in textbooks and other scientific publications was slow and fitful until the name 'Brucellosis', first suggested by Dubois in 1920, began to replace the old labels in recent years.

---

[34] *Undulant Fever also Known as Mediterranean or Malta Fever*, Memorandum by the Camera Medica and the Malta Branch of the British Medical Association, Malta, 1927.

[35] *Malta Government Gazette Supplement*, 27th October 1933, p. lxiv.

CHAPTER 25

Rabies

A WATCHFUL eye was kept by the Lazaretto authorities upon the health of animals imported into the Island. By the early years of the nineteenth century a good screening system had been devised. Diseased cattle were excluded from the Island and the importation of animals from ports and countries where epizootics were known to prevail was prohibited. Sometimes the measures adopted were not so drastic but every precaution was taken to reduce the risk of diseased cattle reaching Malta; thus when in 1818 a contagious illness broke out among cattle in Sicily no animals were permitted to be landed in Malta without their being first examined by qualified persons appointed by the government.

Thanks to the vigilance of the sanitary authorities, diseases of animals were so rare in Malta that foreign veterinary surgeons could gather little information on the subject from local sources; this, however, did not apply to rabies. This illness was already known to exist in the Island in the seventeenth century when Dr. Gian Francesco Bonamico (1639–1680) was prescribing the 'tongue of St. Paul' as a very 'efficacious' remedy against the bites of rabid dogs.[1] In 1725 dogs in Malta and Gozo became furious and attacked all those who approached them. A decree of the 1st February over the signature of the Grandmaster ordered their extermination to check the spread of the epidemic.[2] A few years later another decree of the 17th May 1729 'commanded that every person of whatever rank and condition must keep his dogs on the leash inside the house and must kill the animal immediately it became rabid'.[3] During this century the disease attracted the interest of Dr. Giuseppe Demarco (1712–1789) who wrote a Latin treatise which still exists in manuscript form.[4]

Cases are recorded as having occurred in 1803. Many instances of the disease, both in humans and in dogs, were observed in 1805, 1809 and 1810.[5] Dr. John Hennen, speaking of the incidence of rabies during the few years prior to 1813, states that canine madness occurred with a frequency and violence never known before and that many individuals perished from it.[6] Further outbreaks in the months of November and December 1818 and again in February 1819 caused considerable alarm. Owners were ordered to keep their dogs at home and the police were empowered to destroy any dogs found at large in the streets while a small sum of money was offered as a reward to the public for every dog killed in the streets of Valletta and the three cities.[7] Similar measures were taken in successive years during the summer months to prevent 'any bad consequence that might result during the excessive heat of the season from the extraordinary number of dogs that continually roam in the streets'.[8]

---

[1] Manuscript 15, fol. 141, Royal Malta Library.

[2] *L'Avvenire*, 12th July 1851, p. 682.

[3] Manuscript 429, Years 1722–1736, fol. 166, Royal Malta Library.

[4] Manuscript 1345, no pagination, Royal Malta Library.

[5] *Storia della Società Medica d'Incoraggiamento di Malta*, Malta, 1845, p. 145.

Cases of human rabies occurred in 1847. The history of a patient, on whom ether inhalation was tried unsuccessfully to control the convulsions, was described by Dr. Thomas Spencer Wells, R.N., F.R.C.S., who was then on the staff of the Naval Hospital at Bighi.[9] At a meeting of the 'Società Medica', held on the 16th January of the following year, Dr. G. C. Delicata read a paper on rabies in which he described its symptomatology, differential diagnosis and treatment. In discussing its aetiology he confessed that the cause of the illness was still unknown but he emphasised its 'contagiosity'. He, therefore, advocated the enforcement by the government of a period of quarantine on imported dogs equal to the incubation period of the malady and of the muzzling of dogs during the prevalence of the disease.[10] In 1859 His Excellency the Governor, having received report of the death of a dog from rabies, and the summer heat being then about to set in, ordered the confinement and restraint of all dogs. As, however, some doubt arose as to the power of the Executive in such cases, Ordinance IV of 1859 was enacted to empower the police to destroy any dog found in the streets without a muzzle or with a muzzle insufficient to prevent the animal from biting.[11]

An outbreak occurred in March 1863, reaching its peak in June. Many dogs were destroyed.[12] Another epidemic followed in 1867. The police took to exterminating dogs by means of poisoned meat-loaves but, following the accidental death by poisoning of two children who ate one of these baits picked up from the street, this method of dog destruction was abandoned in favour of the use of firearms, the dogs being shot in the ditch beneath Porta Reale (Kingsgate).[13]

In June 1876 Dr. Gavino Gulia suggested the therapeutic use of vesicant insects, then in vogue on the continent of Europe and in America, for the treatment of dog bites such as the two local species of 'meloe'.[14] Others recommended the enlargement, with free bleeding, of the wound and even its cauterisation with a red hot iron.[15] It will be recalled that the first inoculation against rabies by Pasteur took place only in 1882. Six years later persons bitten by rabid dogs were conveyed at government expense to Naples for specific treatment.[16]

---

[6] Hennen, J., *Sketches of the Medical Topography of the Mediterranean*, London, 1839, p. 527.

[7] Government Notices of 16th November 1818 and of 6th February 1819, *Repertorio di proclami*, Malta, 1844, vol. i, p. 60.

[8] Government Notice of 9th July 1835, *Malta Government Gazette*, 15th July 1835, p. 237.

[9] *Malta Times*, 24th August 1847, p. 3.

[10] *Storia della Società Medica . . .*, pp. 145 and 187.

[11] *Malta Government Gazette*, 8th April 1859, p. 67.

[12] Segond, G., *Storia ta Malta u Ghaudex*, Malta, 1930, p. 446.

[13] *Ibid.*, p. 466.

During the epidemic of August 1888, over 4,500 dogs were killed by the police while a tax of one shilling was levied on every one of over ten thousand dogs that were allowed to be retained by their owners. The licensing of dogs was made compulsory by Ordinance XVIII while provisions for the detention of imported dogs in quarantine for six months were made in December 1900.[17]

The last outbreak among dogs occurred in September 1911 when the muzzling of dogs was again ordered.[18] The following years saw the disappearance of rabies but the dog did not lose its epidemiological importance; in fact while this animal ceased to be a cause of anxiety as a source of human rabies, it emerged in a new light as a vector of human kala-azar which by 1913 had become very prevalent.[19]

[14] *Il Barth*, 13th June 1876, p. 127.

[15] Borg, F., *Ghajnuna fil mard ghal gharrieda*, Malta, 1880, p. 40.

[16] Segond, G., *op. cit.*, p. 568.

[17] *Malta Government Gazette*, 8th November 1888, p. 541; 21st December 1900, p. 933.

[18] *Malta Government Gazette Supplement*, 11th October 1912, p. xliv. *Malta Government Gazette*, 23rd September 1911, p. 1031.

[19] *Report of the Chief Government Medical Officer and Superintendent of Public Health for 1913–14*, p. 36.

CHAPTER 26

Smallpox

SMALLPOX has existed along the Mediterranean littoral since at least as early as the eighth century. It is, therefore, quite probable that the disease was endemic in the Maltese Islands since early times. When it first assumed epidemic proportions has not been discovered but there is no doubt that its prevalence was causing some concern in the mid-seventeenth century. One of the diseases for which the 'terra sigillata' or 'grace of St. Paul' was recommended by way of treatment in 1667 was smallpox.[1]

An allusion to a widespread outbreak in 1680 occurs in a manuscript of the eighteenth-century Maltese physician Dr. Giuseppe Demarco.[2] The same writer records the occurrence of 'variolar eruptions' in children in February 1763. In March 1769 smallpox again appeared but no details are available as to its extent though its incidence must have been considerable as the same physician refers to the 'filling of graves' by its victims. Those who were spared from death suffered from blindness in one or both eyes through the scarring of the cornea produced by the healed pustules. Both children and adults were attacked by another outbreak in January 1780. Numerous crops of 'gangrenous pustules' covered the faces and mouths of the patients who generally succumbed to the infection on the eighth day of their illness.[3]

Vaccination or cowpox inoculation was introduced in England by Dr. Edward Jenner as a prophylactic measure against smallpox in 1798. The practice soon spread to the continent and Malta was not long in following suit. Jenner's book, *A Continuation of Facts and Observations Relative to the Variolae Vaccinae or Cowpox*, published in London in 1801, was made available for Maltese readers in an Italian translation in the same year from the pen of a layman, the Abbé D. S. Bellet;[4] however, before the appearance of this publication, the medical profession in Malta was already familiar with smallpox immunisation by means of variolation, i.e. the communication of the disease by inoculation from an affected individual to a healthy subject. This method of forestalling the disease had been current in Turkey since the early eighteenth century and was being tried in certain parts of Italy since at least 1746.[5] Thus Maltese doctors, through the daily contacts which then existed between our Island, the Levant and Italy, had ample opportunity of becoming acquainted with these immunisation procedures. In fact, inoculation against smallpox was being practised in Malta in 1769; however, far from preventing the development and spread of the disease, the 'grafting' is said to have produced masses of confluent pustules in some of those who had been inoculated—indeed the results were so disappointing that inoculation was prohibited by a decree of the Grandmaster in 1769. During the epidemic of 1780 variolation was again tried with the same unsatisfactory results by those who had 'forgotten' or rather 'purposely ignored' the unfortunate events of 1769.[6]

---

[1] Manuscript 15, fol. 141t, Royal Malta Library.

[2] Manuscript 36, fol. 138, Royal Malta Library.

[3] *Ibid.*, fols. 32, 61 and 62, Royal Malta Library.

[4] Bellet, D. S., *Continuazione di fatti e d'osservazioni intorno al vajuolo della vacca fatte da Odoardo Jenner*, Malta, 1801.

Following Jenner's demonstration that vaccination was a less risky procedure than variolation, cowpox inoculation received the official backing of the Maltese Government at the dawn of the nineteenth century. The Maltese Islands had in those days just come under the protection of the British nation and towards the middle of July 1801 two British doctors were sent by the government from England to inoculate the soldiers and sailors stationed in the Island. One of these physicians, Dr. Jos. H. Marshall, remained in Malta for some time thus affording an opportunity to local practitioners to familiarise themselves with the procedure of inoculation. A number of Maltese children were inoculated in the presence of two Maltese physicians who kept the subjects under observation for any untoward developments. The constitutional effects that followed vaccination were so slight that they would not have been noticed had the two physicians not been aware that the children had been inoculated. As a proof that vaccination was a certain protection against smallpox, the following experiment was performed. Two adults, after being vaccinated, were injected with the smallpox virus taken from an affected infant and were also exposed to infection in the natural way. None of them contracted the disease.[7] Such an experiment would hardly be considered as having any scientific validity to-day in view of the absence of controls and of the small number of individuals vaccinated, but its results were quite convincing to the medical men of the time and the novel method of immunisation began to gain ground in the Island.

An advertisement was inserted in the *Malta Government Gazette* of the 6th July 1814 inviting the inhabitants of Valletta and other parts of the Island to have their children inoculated gratis with vaccine pus by a surgeon, a Mr. William Anderson, who resided at Valletta. By 1821 inoculation was widely practised but the supply of lymph was erratic and when the local stock was low it had to be imported from England and the continent.[8] In May 1824 free inoculation was made available at the Civil Hospital by the Government. In February 1826 vaccine lymph was offered free of charge to physicians practising in the countryside.[9]

---

[5] Bianchini, G. F., *Storia degli innesti del vajuolo fatte in Udine*, Udine, 1749, p. 24.

[6] Manuscript 36, fol. 137, Royal Malta Library.

[7] Bellet, D. S., *op. cit.*, p. 30.

Ninety smallpox cases were landed at the lazaretto from the American warship *North Carolina* when she entered harbour on the 19th January 1827 after having touched at Toulon and Tunis. The death roll was limited to six. The crew of nine hundred and fifty had been vaccinated three times during the previous two years and to this fact, apart from isolation and depuration of the ship, was ascribed the low incidence and mortality among so numerous a mass of men. The *North Carolina* case, therefore, came to be regarded in Malta as a sure proof of the protective powers of vaccination. Parents were encouraged to vaccinate their children and an appeal was made to the government to make use 'without any hesitation of the sacred discovery of vaccination, if need be even repeatedly, in order to prevent or modify at least one of the most terrible scourges to humanity'.[10] During this year, however, the Island was without vaccine matter for nearly eleven months. To ensure a constant supply of lymph one of the assistant surgeons of the Civil Hospital was detailed in December 1827 to 'vaccinate at all times and to find out subjects, if none presented themselves', in order to keep up a succession of vaccinated persons. He received an allowance of one pound a month which, however, was to cease the day that he had no more vaccinated patients on his list and to recommence when he found new patients.[11] When a smallpox epidemic broke out in 1830 a team of vaccinators toured the towns and villages daily. Some indifference was encountered on the part of the people,[12] but in spite of this obstacle 14,500 persons were vaccinated between March 1830 and February 1831.[13]

The infection of 1830 was introduced into Malta by H.M.S. *Asia* which entered harbour from Naples on the 18th February. On the following day a Greek boy on board this ship fell ill with smallpox and died on the 2nd March at the lazaretto. H.M.S. *Asia*, which meanwhile had been undergoing quarantine, was given pratique after fifteen days but on the 9th March another case of smallpox was officially reported on board this vessel. The patient was secluded in a house near the naval hospital. His linen, however, was allowed to be taken for washing to the nearby village of Zabbar where the disease appeared among the civilian population, the first family to be affected being that of the washerwoman who had received the infected linen. The disease spread rapidly both among the crew and the civilian population, crossing over to the sister Island of Gozo. It started to abate gradually after July and ceased entirely in August of the following year.

---

[8] Hennen, J., *Sketches of the Medical Topography of the Mediterranean*, London, 1830, p. 545.

[9] *Malta Government Gazette*, 1st June 1825. Government Notice of 15th February 1826.

[10] Gravagna, L., *Osservazioni mediche sulla vaccinazione e sul vajuolo*, Malta, 1827, pp. 5 and 8.

[11] Permanent Committee from 1st January 1816 to 31st December 1829, fol. 191, Medical & Health Archives, Valletta.

[12] Government Notices of 30th March 1830 and 23rd June 1830, *Malta Government Gazette*, 31st March 1830, p. 89; 23rd June 1830, p. 187.

[13] Davy, J., *Notes and Observations on the Ionian Islands and Malta*, London, 1842, pp. 368 *et seq.*

At first the government endeavoured to stem its advance by the isolation of infected individuals but as no success appeared to follow this policy, it was not long continued and the epidemic was allowed to run its course unchecked except by vaccination. A haemorrhagic tendency such as bleeding gums, bloody stools and skin petechiae, characterised the worst cases which generally ended fatally before the eighth day. In vaccinated persons the disease ran a mild and short course while the lesions resembled more those of chickenpox than smallpox. In those days it was still a matter for controversy whether chickenpox was a separate disease or merely a mild form of smallpox. This question was hotly debated when a number of cases of chickenpox occurred immediately after the cessation of smallpox; in fact the opinion gained ground that smallpox and chickenpox were different forms of the same malady but Dr. L. Gravagna, the Maltese Police Physician, had no doubts as to the distinct nature of chickenpox.

The number of persons attacked was 9,067 in Malta, of whom 1,172 died; and 2,284 in Gozo with a mortality of 351—representing a proportion of one fatality in every six persons attacked. The civilian population was then estimated at 100,839 persons amongst whom one in every twelve was infected and one in every eighty-five died. The worst hit were Valletta, Zejtun, Bormla and Senglea. More males were attacked than females while the greatest incidence and mortality was in infants and in adults up to twenty-nine years. Of those who contracted the disease and survived a considerable number remained horribly defaced and many others became blind.[14] Less than half the number of individuals affected had been vaccinated; of the latter only 141 died—a circumstance that was accepted as clearly demonstrating the protection afforded by vaccination.[15] Arm to arm vaccination was then the usual method employed but as parents were generally averse to allowing the transfer of vaccine lymph from their children it was not possible to maintain a regular supply of 'pus' in the Island. The expedient was, therefore, devised in January 1835 of keeping vaccination 'in constant action' at the nursery of the House of Industry where a number of infants were daily received as foundlings—a procedure that persisted until April 1841 if not later.[16]

The next smallpox epidemic to grip the island occurred about a month after the disappearance of cholera in 1837. It started in Gozo and by December 1837 it reached Malta. Medical practitioners were supplied with vaccine matter by the government and free vaccination was made available at the beginning of January 1838 in all the towns and villages of Malta and Gozo.[17] Contrary to previous experience the source of this outbreak did not show the usual progressive advance up to a peak followed by a gradual decline to its end but it manifested itself in small repeated waves with periods of latency in between. One of its features was that it did not spare vaccinated persons although severity and fatality were less frequent among them than among non-protected individuals. However, great store had been laid on the protective powers of vaccination and the disappointment caused by the absence of an absolute immunity against the infection gave rise to a hostile current of opinion that tended to condemn vaccination as a useless procedure. Dr. C. G. Schinas, a Greek physician who had settled in Malta, still retained his confidence in the value of vaccination and he stood up against its denigrators. In an editorial in *L'Ape melitense*[18] he analysed the factors that were responsible for the apparent failures. He found that many persons had not been properly vaccinated. He insisted on the need for expert inoculators who were to keep the patient under observation until they had ascertained that vaccination had been successful. He held that the greater the number of pustules produced the stronger was the immunity conferred on the subject and proposed that at least six pustules were to be procured. He also observed that a considerable number of people had been vaccinated many years prior to the outbreak of smallpox and that no account had been taken of the fact that the protection afforded by vaccination was of a temporary nature. Revaccination had been advocated and followed in Germany, Russia and other countries as early as 1823 and Schinas recommended the same procedure as he had noted that smallpox epidemics tended to occur at intervals of five to seven years.[19] It is remarkable how modern these views remain after more than a century of medical progress.

---

[14] Mitrovich, G., *The Cause of the People of Malta*, London, 1836, p. 75.

[15] Davy, J., *op. cit.*, p. 368.

[16] Charitable Institutions, Book No. 29, fol. 251. Letter Book from 2nd January 1838 to 28th April 1842, fol. 119, Medical & Health Archives, Valletta.

Interest on the part of the profession concerning the various aspects of vaccination was revived by the 'Società Medica d'Incoraggiamento' in 1840. Discussions were held and inoculation experiments on two cows carried out. The animals were injected with the smallpox virus in their udders where they developed pustules from which lymph was taken and used for the vaccination of children.[20] The offshoot of these activities was the approval of a scheme for the propagation of vaccination among the public. A team of vaccinators was selected from among the members of the association and vaccination centres were set up in three pharmacies in Valletta.[21] Fresh vaccine matter was procured from Sicily (Catania).[22] The help of the church authorities was enlisted to induce the masses to avail themselves of the benefits of gratuitous vaccination.[23]

---

[17] Minute Book from 13th September 1837 to 27th June 1843, fol. 43, Medical & Health Archives, Valletta.

[18] *L'Ape Melitense*, 1838, i. 81–94.

[19] *Il Barth*, 5th September 1871, p. 30.

[20] *Il Filologo*, 23rd December 1841, p. 50; 10th March 1842, p. 95. *Il Filocamo*, 15th February 1841, p. 19.

As early as 1839 Dr. G. B. Saydon had proposed to the Chief Government Medical Officer that the government introduce compulsory vaccination for children in order to 'combat the fanaticism and ignorance of mothers' and to set up vaccination centres in all districts,[24] but vaccination was only made compulsory in 1855.[25] In August of that year 'two hundred vaccine points, fifty glasses and twelve tubes of lymph' were ordered by the government from England.[26] The stock of vaccine, however, was not always sufficient to meet the needs of the population although a medical board had been appointed by the Governor in January 1842 to ensure an unfailing supply of vaccine matter.[27] Partly because of this reason and partly because of indifference on the part of the people, the law of 1855 was not regularly observed. In fact, of the babies born in that year, 37 per cent remained unvaccinated while in the following year this percentage rose to 80.[28] To this neglect and to the absence of quarantine precautions was attributed the introduction of smallpox in 1861. On the 22nd April of that year a liner voyaging from the United Kingdom and Gibraltar to Alexandria arrived in Malta with cases of smallpox on board. Passengers were allowed to go ashore and soon afterwards the disease broke out. It appeared first in the countryside and then in Valletta where in October it wrought havoc at the 'Manderaggio'.[29] This epidemic carried off 362 persons.[30]

Smallpox was again prevalent in various parts of Europe in 1870. According to the reckoning of the Chief Police Physician it reached Malta in September of the same year but the first unequivocal cases of the disease did not occur until three months later. On the 26th December 1870 a ship from London came to Malta while on her way to Trieste. The master informed the port authorities that he had two men suffering from smallpox on board. The patients were seen by the Chief Police Physician who confirmed the diagnosis of smallpox and ordered the removal of the men to the Central Hospital where one of them died two days later. The admission of smallpox cases into a general hospital was severely criticised by a section of the local press as a highly dangerous procedure because, although it was still a mystery how smallpox was communicated from one person to another, it was well known that it was a contagious illness.[31] From the Central Hospital the disease spread throughout the whole Island. On the 7th February 1871 the government called upon medical practitioners to notify the police of any smallpox cases coming under their care in order that measures for the protection of the public health be taken.[32] Over one thousand naval officers and men were vaccinated and none of them is said to have contracted the illness.[33] The revaccination of civilians was advocated[34] and Ordinance II of 1855 was replaced by Ordinance I of 1871 which enforced the vaccination of minors and adults.[35] The new law also provided for the verification of the results of the operation and the repetition of vaccination if the first attempt was unsuccessful, while it empowered physicians to transfer vaccine lypmh from vaccinated individuals for the vaccination of others. Arm to arm vaccination was still in general use although a current of opinion was already making itself felt against this method and in favour of the employment of animal vaccine to avoid the risk, inherent in arm to arm vaccination, of transmitting syphilis.

---

[21] *Storia della Società Medica d'Incoraggiamento*, Malta, 1845, pp. xxix, xxxiv, xxxix and xli.

[22] Government Letters to Committee of the Government Charitable Institutions from 1837 to 1843, no pagination, Medical & Health Archives, Valletta.

[23] Government Letters to the Inspector of Charitable Institutions & Prisons 1848–1852, letters of 6th June 1849, no pagination, Medical & Health Archives, Valletta.

[24] Inglott, G. F., 'Vaccinazione umana', *Malta*, 17th December 1907, p. 2.

[25] *Malta Government Gazette*, 19th March 1855.

[26] Inspector's Letters to Government from 31st August 1850 to 13th October 1857, fol. 195, Medical & Health Archives, Valletta.

[27] *Malta Government Gazette*, 28th January 1842, p. 10. Inspector's Correspondence from 4th February 1851 to 18th January 1859, fol. 51, Medical & Health Archives, Valletta.

[28] Inspector's Letters to Government from 31st August 1850 to 13th October 1857, fol. 282, Medical & Health Archives, Valletta.

[29] *L'Ordine*, 26th April 1861, p. 3; 18th October 1861, p. 3.

[30] Faure, G., *L'Istoria ta Malta u Ghaudex*, Malta, 1913, vol. vi, p. 261.

Unvaccinated children were debarred from admission to boarding schools and unvaccinated adults from government employment, while those already in such posts were required to produce a certificate of successful vaccination under penalty of expulsion from their office. In spite of these and other punishments laid down for those who tried to evade the new Ordinance,[36] the law was not regularly executed while a number of physicians opposed revaccination as they held that one vaccination in childhood afforded adequate protection against the disease.[37] The epidemic dragged on until by September 1871 seven thousand persons were attacked with seven hundred deaths. In the graver cases the whole of the patient's body was covered by a confluent mass of vesicles which, with the swelling of the face, gave the patient a pathetic and at the same time a horrible aspect.[38]

The indefatigable work of medical men during this epidemic earned them the recognition and admiration of the public. Physicians 'not only run the risk of catching the infection themselves but also that of carrying it among those they hold dearest in this world, their own children. And yet we have not heard of a single instance in which medical assistance has been refused.' Among the victims of this epidemic was the Visiting Physician of the Lazaretto, Dr. A. Arrigo, who died at this hospital where he was attending the smallpox patients.[39]

---

[31] *Public Opinion*, 11th April 1871, p. 2; 9th May 1871, p. 2.

[32] *Malta Government Gazette*, 11th February 1871.

[33] *Il Barth*, 16th October 1871, p. 49.

[34] *Malta Government Gazette*, 11th February 1871.

[35] *Malta Government Gazette Supplement*, 10th July 1908.

[36] *Malta Government Gazette*, 24th March 1871.

[37] *Il Barth*, 25th July 1871, p. 8.

[38] *Il Barth*, 5th September 1871, p. 25.

From 1897 to 1925, a period of almost thirty years, there were six epidemics of smallpox. The number of cases in 1897–98 was 107 with twenty deaths. Following the appearance of cases of the disease in January 1903, three physicians were appointed by the Governor, on the advice of the Council of Health, to enter houses to visit persons affected or suspected of being ill with smallpox and to order any hygienic and sanitary measures authorised by law against the spread of the infection.[40] The disease reappeared in epidemic form in 1907–08 when 107 persons were reported as suffering from smallpox and twelve deaths were recorded. There were further outbreaks in 1909–10, 1915 and 1919–20 but they were more restricted than previous ones. All these epidemics were traced to arrivals from Tripoli, Tunis and other neigbouring ports as was that of 1925–26.[41]

The 1925–26 epidemic started on the 13th April at Mellieha where a man, arriving from Tunis, went to join his relatives. The disease spread among his family and neighbours. Compulsory vaccination was resorted to, exemption being granted in the case of children under seven years of age and of all persons who had been protected within the preceding two years. It was reckoned that 75 per cent of the Maltese population was vaccinated. From April 1925 to February 1926, one hundred and four persons were affected of whom nineteen lost their lives. Gozo remained free throughout.[42]

Smallpox reappeared in Malta in 1946, the first case being diagnosed on the 2nd June in a naval rating at the 90th General Hospital at Mtarfa. The infection did not spread but was limited to two service and five civilian cases with one fatality. As the Isolation Hospital on Manoel Island was still in the hands of the naval authorities, an emergency smallpox hospital was set up in the 39th General Hospital at Mellieha which was made available to the Civil Government.[43]

[39] *Public Opinion*, 27th June 1871, p. 2; 18th July 1871, p. 3.

[40] *Malta Government Gazette*, 16th January 1903, p. 23; 5th October 1903, p. 985; 1st December 1903, p. 1181; 23rd December 1903, p. 1215.

[41] *Reports of the Public Health Department for 1907–8*, p. J4; *for 1909–10*, p. J4; *for 1919–20*, p. I4.

[42] *Report of the Public Health Department for 1925*, p. P4; *for 1926*, p. P4.

[43] *Report on the Health Conditions of the Maltese Islands for the year 1946*, p. xi.

CHAPTER 27

Influenza

THE Italian word '*influenza*' came into use at a time when medical men believed that astral bodies and atmospheric phenomena could influence the health of human beings and produce disease on a vast scale. Under the name of 'influenza' may have been included various different respiratory affections whose common manifestations were a sudden onset, prostration and fever. It is, therefore, questionable whether the waves of 'influenza' that have been described as sweeping over Europe since remote times were actually of the same nature as the illness to which the term is applied to-day. It has been estimated that in the sixteenth century there were eleven epidemics in various parts of Europe and that a further sixteen occurred in the following one hundred years.[1]

The existence of 'influenza' in the Maltese Islands in an epidemic form is mentioned in a petition of the 18th February 1682 sent by the Gozo apothecary to the Grandmaster. However, the writer makes only a mere allusion to the disease that hit that Island and furnishes no information as to its duration, clinical features or mortality. What prompted him to address himself to the Grandmaster was not the scientific spirit but his concern to secure a just remuneration from the government of the day for the drugs which he had supplied to the poor sick of Gozo during the epidemic.[2]

More informative is the diary of a layman who, in the last days of February 1730, recorded the onset of a 'catharrhal influenza' with slight fever which infected almost the whole population of Malta. Another grave 'influenza of catharrhs, headaches and fevers' occurred in March 1733. In January 1746 there was a further outbreak which started among the crews of the Order's fleet and in the following months spread to the civilian population. Many sudden deaths occurred and the illness appears to have excited so much consternation that a 'triduum' in which the Grandmaster himself took part was held in St. Paul's Church of Valletta to implore the intercession of St. Andrea Avellino.[3] Another 'memorable' influenza that caused many deaths at Mdina was that of

---

[1] Fagge, C. H. and Pye-Smith, P. H., *The Principles and Practice of Medicine*, London, 1888, second edition, vol. ii, p. 274.

[2] Archives 646, fol. 135, Royal Malta Library.

[3] Laurenza, V., *Giornale dei successi dell'isola di Malta e Gozo dall'anno 1729 all'anno 1750 scritto da Gaetano Reboul*, Malta, 1939, pp. 11, 24 and 73.

1754. The Seminary of this old city had to be evacuated and pontifical ceremonies were suspended.[4]

Influenza visited the Island in 1836, few persons escaping the infection. Early in November 1847 'numbers of persons, afloat and ashore, civil and military, high and low, rich and poor' again had the disease.[5] The outbreak subsided by the end of the month. No statistical data are available but it has been recorded that 'the Viaticum is constantly to be seen and the voice of the Priest heard on his dismal mission to shrive the dying'.[6] An epidemic of fever, accompanied by profuse sweating, lassitude, headache, exanthemata and lumbar pains, appeared in 1864–65 but doubt was expressed as to the real nature of this illness though it was diagnosed by some as atypical grippe. Cholera had followed in the wake of the epidemics of 1836 and 1864–65 and when influenza again occurred in September 1873 fears were entertained of an impending outbreak of cholera which, however, did not materialise. The 1873 epidemic had all the typical manifestations of influenza. Cases were first noted in Senglea from where the disease spread rapidly to Bormla, Pawla, Zejtun and the surrounding villages. Hundreds of persons were struck down but none of the usual pulmonary complications was observed and mortality was slight.[7]

The first epidemic of the present century was in 1904–05 when 760 persons were affected.[8] The 1918–19 pandemic did not spare the Maltese Islands. On the 4th October 1918, government issued regulations aiming at the prevention of the spread of the disease by the maintenance of cleanliness and the prevention of overcrowding in public places.[9] The infection was not halted in spite of these precautions and between the 1st September 1918 and the 1st March 1919 a mortality of 493 was registered; if the deaths ascribed to pneumonia and bronchopneumonia were included the total would be 651.[10] The middle of March saw the culminating point of a third wave of influenza which was almost over by May. Cases continued to occur during the last quarter of 1919; the epidemic reached its peak in February and March of 1920 with 656 cases and a mortality of thirty-one. Gozo contributed nearly one-third of the total morbidity while practically all the country districts of Malta, except Qrendi, remained untouched.[11] During the subsequent months the disease had returned to the limits of its ordinary incidence before the 1918–19 pandemic which had caused the death of three out of every thousand persons.[12]

[4] Manuscript 386, fol. 85, Royal Malta Library.

[5] *The Malta Times*, 9th November 1847, p. 2.

[6] *Malta Mail*, 19th November 1847, p. 3.

[7] *Il Barth*, 15th November 1873, pp. 342–349.

[8] *Report of the Public Health Department for 1904–05*, p. J4.

[9] *Malta Government Gazette*, 4th October 1918, p. 829.

[10] *Malta Government Gazette*, 21st March 1919, p. 245.

[11] *Report of the Public Health Department for 1919–20*, p. 13.

[12] *Reports of the Public Health Department for 1920–21*, p. K4 and *for 1919–20*, p. 11.

In March 1921 there was another outbreak which did not assume epidemic proportions until January and February 1922. It was, however, short lived, being over by April. The illness was generally very mild and in many instances no medical advice was sought so that the number of notified cases—2,575—is not an accurate indication of the extent of this epidemic.[13]

Towards the close of 1928 influenza was epidemic in Europe. It manifested itself in Malta with a sharp outbreak in February 1929, reaching its climax in March and declining rapidly in April. Just over one thousand cases were reported in Malta and Gozo of whom half were between the ages of 20 and 45 and about one-quarter between the ages of 5 and 10. Mortality was slight.[14]

Small outbreaks of a mild character occurred in the spring and the last months of 1934. The wave of influenza that struck Europe towards the end of 1936 reached Malta in the early part of 1937 causing twenty-four deaths out of three hundred cases.[15] A similar increased incidence was registered in 1940 and 1942 with a major spread of a mild character and very low mortality in 1943. A rise in the number of cases was again recorded in 1948, 1951 and 1952.[16] The Asian pandemic of 1957 which started in south-west China gripped Malta in August when the first cases were observed after the arrival of a ship in which members of the crew were convalescing from the disease. Its peak was in September with a second wave in November that tailed off by the end of December. The unusual figure of 8,783 cases was reported. Mortality was slight but relapses were common.[17]

---

[13] *Reports of the Public Health Department for 1921–22*, p. K3 and *for 1922–23*, p. P4.

[14] *Report of the Public Health Department for 1929*, p. Q2.

[15] *Report of the Public Health Department for 1934*, p. 2. *Report on the Health Conditions of the Maltese Islands for the year 1940*, p. xii.

[16] *Report on the Health Conditions of the Maltese Islands for the year 1940*, p. xv; *for 1942*, p. vi; *for 1943*, p. viii; *for 1948*, p. xiv; *for 1951*, p. 15; *for 1952*, p. 16.

[17] *Report on the Health Conditions of the Maltese Islands for the year 1957*, pp. 27 and 33.

CHAPTER 28

Poliomyelitis, Leishmaniasis, Diphtheria

POLIOMYELITIS

Before 1942 poliomyelitis had occurred only sporadically in Malta. The disease was made notifiable in 1921 and up to 1941 only sixty-one cases had been reported though it is probable that its incidence was higher than this figure since mild and abortive forms of the disease tended to go unrecognised.

The first epidemic to strike the Island began in November 1942 just as the long siege and the period of food shortage in the Second World War had come to an end. The outbreak was of an explosive character and appeared simultaneously in both Islands. The number of civilians attacked between the 15th November 1942 and the 5th June 1943 was 426, children under five years of age predominating among its victims. The cases among service people numbered fifty-seven, all being adult United Kingdom personnel. A striking feature, in this connection, was the immunity to the disease of the Maltese troops who, although they often worked side by side with men from the United Kingdom, completely escaped infection. Owing to the unusual onset of the illness and the general disturbance and somnolence that masked the existence of muscular paralysis, some of the initial cases went unrecognised at the beginning of the outbreak or were mistaken for some other disease. Mortality among civilians was only 3·5 per cent in contrast to a death rate of 19 per cent among service people.

The question as to whether the virus had been introduced by service personnel, who were the only persons to enter the Island from abroad during the war years, was raised; but it was argued that the relatively high death rate among service people, coupled with the absence of cases in the adult Maltese population, supported the view that the virus, rather than being imported from abroad was native to the Island. On the other hand no special local circumstances could be adduced, apart from food shortage, to account for the appearance of the outbreak. Various factors which might have conceivably provoked its onset were considered, such as insect vectors, powdered milk (a form of food recently introduced into the Island), water supply and drainage systems, but no positive evidence was found to incriminate any of these sources. Droplet infection appeared to have been responsible for its propagation.

In dealing with this epidemic the medical authorities were faced with an unexpected and novel problem. For want of a more suitable place civilian patients were accommodated at St. Luke's Hospital which was then still under construction. Orthopaedic appliances were in short supply but this defect was made good by improvised splints of wood and calico slings. Except for one masseuse and one voluntary assistant no physiotherapists were available until an after-care sister from the Wingfield Morris Hospital of Oxford came out to Malta at the end of February 1943.

Though co-operation between the civilian and the service medical authorities did much to lessen the difficulties connected with the provision of equipment and physiotherapy, the epidemic clearly demonstrated the need for a permanent orthopaedic service to cope with all kinds of cripples. Professor H. J. Seddon, D.M., F.R.C.S., Nuffield Professor of Orthopaedic Surgery at Oxford, was instrumental in filling this need. He came to Malta in March to direct the treatment of polio cases and to make provision for their after-care and he took this opportunity to submit schemes for the establishment of a physiotherapy department and an orthopaedic service. Immediate action was taken to implement his recommendations and by July 1943 the foundations of the department were laid down at Bugeja (Central) Hospital. Apparatus for radiant heat and for other forms of electrical therapy was donated by the British Red Cross and Order of St. John War Organisation. Clinics were also set up in various districts for the convenience of polio patients while a domiciliary service was instituted for those who, because of transport difficulties occasioned by the war, were unable to attend these clinics.

In March 1945 an Orthopaedic Division was set up at the Central Hospital. As its work expanded almost the whole complement of beds at Santo Spirito Hospital was later allocated to orthopaedic cases.[1] A second outbreak, on a smaller scale, began on the 20th November of that year and, after reaching its peak in December, tailed off in April 1946. The number of cases notified was seventy-nine among civilians and six among servicemen. As in the previous epidemic most of the cases were in children under five years of age but no deaths occurred. His Excellency the Governor, Sir Edmund Schreiber, placed Verdala Palace, one of his official residences, at the disposal of the Medical and Health Department. On the 4th January 1946 the palace was opened as a children's orthopaedic hospital for poliomyelitis patients who still needed hospital treatment after the acute stage of their illness.[2]

---

[1] Agius, T., Bartolo, A. E., Coleiro, C. and Seddon, H. J., 'Clinical Features of the Poliomyelitis Epidemic in Malta, 1942–43', *British Medical Journal*, 1945, i. 759. Bernstein, H. G. G., Clark, J. M. P. and Tunbridge, R. E., 'Acute Anterior Poliomyelitis Among Service Personnel in Malta, *British Medical Journal*, 1945, i. 763. Debono, J. E., Debono, P. P., Coleiro, C. and Agius, E., *Acute Anterior Poliomyelitis*, Malta, 1943. *Reports on the Health Conditions of the Maltese Islands from the year 1942 to 1946.*

The disease again broke out in June 1947 and lasted until September by which time it attacked seventy-seven persons of whom eighteen were service people.[3] A more serious outbreak occurred in 1950. The first civilian case was notified on the 27th May. The number of cases increased until it assumed epidemic proportions in July. It reached its peak towards the end of August when the infection spread to the Island of Gozo. It began to taper off in December until it finally abated in February 1951. The total number of civilians who contracted the illness was 178 the great majority of whom were children below the age of four years. There were fifty-two cases among service families most of whom were ten years of age and over. The most severe cases occurred in the initial stages of the outbreak. Of the 151 patients that survived the illness, 92 per cent made a complete or partial recovery—a more favourable outcome than that of the 1942–43 epidemic when only 87 per cent recovered or improved. The small number of residual disabilities was due to early diagnosis, first rate orthopaedic treatment and an efficient nursing service.

In spite of the investigations carried out, both during this and previous outbreaks, the source and method of spread of the infection remained obscure.[4] The disease has now become endemic. In November 1956 an immunisation campaign was launched by the Medical and Health Department for children from one to ten years of age by the use of a vaccine of British manufacture;[5] initially, however, not enough vaccine was made available for Malta owing to limited production but another consignment of a modified form of Salk vaccine was received in June 1957 and by July 1959, 34,800 children had been vaccinated.[6]

LEISHMANIASIS (KALA AZAR)

The occurrence of a morbid condition characterised by enlargement of the spleen and profound anaemia in children below the age of five years had long been known to the Maltese medical profession but its origin had always been obscure although at times it was believed to be tubercular in nature. In 1909 Dr. A. Critien, then the Senior Medical Officer of Health, identified some forms of splenic anaemia with visceral leishmaniasis.[7] In the following year he discovered leishmaniasis in dogs.[8] In

[2] *Reports on the Health Conditions of the Maltese Islands from the year 1945 to 1947.*

[3] *Report on the Health Conditions of the Maltese Islands for the year 1947.*

[4] *Reports on the Health Conditions of the Maltese Islands from the year 1950 to 1951.* Galea, J., 'The Epidemic of Poliomyelitis in Malta during 1950–51', *The Journal of the Royal Institute of Public Health and Hygiene*, 1953.

[5] *Times of Malta*, 5th November 1956, p. 7.

[6] *Times of Malta*, 5th June 1957, p. 4; 23rd September 1957, p. 7; 23rd July 1959, p. 3.

[7] Critien, A., 'Infantile Leishmaniasis (Marda tal Biccia) in Malta', *Annals of Tropical Medicine and Parasitology*, 1911, v. 37. *General Health Report 1910–11*, pp. ii and xviii.

[8] *Report on the Health of the Maltese Islands during 1931*, p. vii; *during 1932*, pp. ix, lxv and lxvii.

1911 other workers showed that the causative organism could be conveyed from the dog to man by the dog-flea but the part played by the sandfly in the aetiology of the disease was also recognised and early in 1931 members of the Kala Azar Commission of the Royal Society visited Malta in connection with their investigations regarding the part played by the sandfly in the transmission of the disease.[9] By 1923 a Kala Azar Clinic was established at the Malta War Memorial Hospital for Children and also at the Central Hospital for the treatment of leishmaniasis by antimony preparations.[10]

The occurrence of Kala Azar in Maltese adults is rare[11] and was not observed until 1931[12] but in British residents it had been noted as early as 1913.[13] Localisation of the infection to the lymph nodes was first described in British soldiers stationed in Malta in 1958.[14]

The earliest attempts to control the spread of the disease through spraying of houses by an insecticide go back to 1912 but a thorough campaign against the vector by the DDT residual technique was only carried out in 1946. The eradication of the vector's breeding places—among which may be mentioned the decayed stems of the prickly pear and the empty shells of snails—was also taken in hand. To these measures has been attributed the marked decline in the incidence of leishmaniasis since 1949.[15]

DIPHTHERIA

There are hints that a throat infection—believed to be diphtheria—prevailed in epidemic proportions as long ago as the fifteenth century.[16] It began in 1452 and was still in progress in 1455 by which time it had carried off seven hundred persons.[17] The first undoubted evidence of the existence of diphtheria in Malta belongs to the year 1857 when the disease was prevalent over the whole of Europe.[18] The first recorded death from diphtheria occurred on the 24th July 1859 at Valletta in a girl of thirteen years who was reported to the sanitary authorities as dying of 'angina pseudo-membranosa'. Two other deaths, also of children, happened in the following year. Cases were first reported as 'diphtheria' in 1862 although the term 'angina diphtherica' was also in current use. Only a few isolated cases from scattered areas were observed up to the winter of 1869 when the disease spread over the whole Island killing ninety-six persons of whom eighty-five were children under ten years of age.[19] It went on increasing in extent and severity assuming epidemic proportions in 1870 when 338 individuals, of whom 324 were children, fell victims to the disease. In this year the illness crossed over to Gozo for the first time. The outbreak lingered on for a few years so that it had not completely abated by 1874. It has been estimated that between 1859 and 1874, 1,053 persons were destroyed by it in the two Islands.

---

[9] *Report on the Health of the Maltese Islands during 1931*, p. vii.

[10] *Report on the Health of the Maltese Islands during 1932*, p. ix.

[11] Agius Ferrante, T. J., 'Infantile Visceral Leishmaniasis in the Maltese Islands', *British Medical Journal*, 1955, ii. 655.

[12] *Report on the Health of the Maltese Islands during 1932*, p. ix.

[13] Bassett-Smith, P. W., 'Kala Azar or Parasitic Splenomegaly and Allied Infections', *British Medical Journal*, 1914, ii. 1058. Lipscomb, F. E., and Gibson, M. O. J., 'Visceral Leishmaniasis (Kala Azar) in an Adult Contracted in Malta', *British Medical Journal*, 1944, i. 492.

[14] Bell, D. W., Carmichael, J. A. G., Williams, R. S., Holman, R. L. and Stewart, P. D., 'Localised Leishmaniasis of Lymph Nodes', *British Medical Journal*, 1958, ii. 740.

[15] Agius Ferrante, T. J., *op. cit.*, p. 654.

[16] Gulia, G., *Notizie cliniche sulla difteria*, Malta, 1870, p. 7.

[17] Manuscript 737, fol. 98, Royal Malta Library.

[18] Critien, A., 'The Infant Mortality in the Maltese Islands', *Public Health*, 1909, xxii. 330.

Initially it was hoped that the disease, having run its course, would die out not to reappear again as long as it was not freshly imported from abroad; but as the disease, contrary to expectation, became endemic with periodical recrudescences the Chief Police Physician was forced to declare that 'diphtheria seems to be inextinguishable and if it loses strength or lies dormant in summer it awakens in the autumn as strong and fatal as before'.[20]

Diphtheria antitoxin serum was first obtained from England and used in Malta in August 1895;[21] few persons, however, availed themselves of this treatment so that ten years later the Chief Government Medical Officer was still deploring the 'excessive death rate'—32 per cent—from diphtheria. It was only in Gozo that people showed themselves willing to receive antitoxic serum where, consequently, the mortality from the disease was low.[22] The value of prophylactic inoculation against the illness was also insufficiently appreciated by the masses for many years[23] but thanks to the facilities and propaganda on the part of the government for free immunisation against diphtheria over 85 per cent of children attending the government schools had been inoculated by 1952. Not much co-operation was, however, forthcoming from parents to curtail the prevalence of the infection among the pre-school population.[24]

[19] Agius, P. P., *Alcuni casi di difterite*, Malta, 1869, p. 3.

[20] Ghio, A., *Report on the Mortality in Malta and Gozo in the Year 1874*, Malta, 1875, pp. 10 *et seq.* Ghio, A., *Third Report on the Mortality in Malta and Gozo for the Year 1876*, Malta, 1877, p. 6. *Il Barth*, 25th July 1871, p. 14.

[21] Letters to Government from 10th April 1895 to 3rd March 1903, fol. 35, Medical & Health Archives, Valletta.

[22] *Report of the Public Health Department for 1903–4*, p. 55. *Report of the Public Health Department for 1905–6*, p. J5.

[23] *Report on the Health Conditions of the Maltese Islands for the year 1937*, p. xv.

[24] *Report on the Health Conditions of the Maltese Islands for the year 1952*, pp. 7 and 21.

CHAPTER 29

Cerebrospinal Fever, Dengue, Encephalitis Lethargica, Yellow Fever, Typhoid, Typhus

CEREBROSPINAL FEVER

THE earliest mention of cerebrospinal fever in Malta occurs in the year 1887 when a few cases were diagnosed among service people. In that year an epidemic of this disease raged in almost all the countries bordering on the Mediterranean and the causative organism must have been introduced into the Island from one of these foci.

The civilian population escaped infection until March 1916 when the first known cases of the disease, confirmed bacteriologically, appeared at Naxxar and Zabbar just after the illness had manifested itself in two privates of the Malta Militia whose families lived in these two villages. The infection then spread to Zejtun, Axaq and Tarxien—all these localities being in proximity to Zabbar. There were only nine typical cases with three fatalities but a number of atypical instances of the disease is believed to have occurred. It was observed that all cases came from overcrowded homes inhabited by poor people living under insanitary conditions.[1]

In 1938 there was a sharp outbreak of eighteen cases with twelve deaths.[2] The disease is now endemic, averaging seven cases a year.[3]

DENGUE

In September and October 1878 a widespread epidemic of 'fever' broke out in many parts of the Mediterranean basin. The illness was new to Malta and so many persons were attacked that a medical commission composed of Maltese and British Army physicians was appointed by His Excellency the Governor to enquire into its nature and causes. The commission reported that the fever varied in duration from one to four days and that it was followed by a protracted convalescence and great debility. The onset was, as a rule, abrupt with headache, pains in the neck, back and limbs. The temperature, which sometimes reached 105 degrees, was accompanied by skin eruptions such as papules, erythemas or small vesicles. The illness always ended favourably.

---

[1] Bernard, A. V., 'Notes on Cerebro-Spinal Fever in Malta', *Malta Government Gazette Supplement*, 16th November 1917, p. 265.

[2] *Report on the Health Conditions of the Maltese Islands for the year 1938*, p. xvii.

[3] *Report on the Health Conditions of the Maltese Islands for the year 1956*, p. 23.

The origin of the disease was ascribed by the commission to local atmospheric and telluric conditions and also to a pandemic wave. An extensive correspondence was entered into with British Consular Offices in the Mediterranean but the commission, in spite of the information available, had to confess that the cause of the illness was to them a mystery; however, a report from the physician of the Egyptian International Board of Health made it appear probable that the disease in question was dengue fever.[4] What strengthens this supposition, apart from the clinical features of the malady and the existence of its vector *Aedes aegypti* in Malta,[5] is the circumstance that in May 1878 several thousand Indian soldiers arrived in Malta—an event that makes it probable that the germ of the disease was introduced by them from India where it was known to occur in extensive epidemics.

No further observations as to the occurrence of dengue in Malta have been recorded though there was a grave risk of its importation from Greece in 1928 by ships harbouring infected mosquitoes and carrying passengers in the infectious phase.[6]

ENCEPHALITIS LETHARGICA

Following Von Economo's description of this disease in 1917, its existence was reported from nearly all European countries. In Malta it was recognised in April 1920 when it was added to the list of notifiable diseases. The first case occurred in the person of a physician and was described by Professor A. Portelli Carbone, the Professor of Medicine.[7] Until then it was doubtful whether any cases manifesting the characteristic features of the illness had occurred in these islands where it is likely to have been introduced by carriers or abortive cases during the 1920 pandemic.[8]

Only fourteen cases were notified up to May 1922 but after a complete abeyance during 1923, forty cases with eleven fatalities were reported in 1924. This high incidence was ascribed to a fresh introduction of infection. The number of cases had fallen to ten in 1926 and to one in 1938—the last case to be reported.[9]

---

[4] *Papers Respecting the Fever which Appeared in Malta and Gozo in September 1878*, Malta, 1879.

[5] *Report on the Health of the Maltese Islands during 1932*, p. lxv.

[6] *Ibid.*, p. lxv.

[7] Portelli Carbone, A., *Epidemic Encephalo-Myelitis in Malta and the Epidemic of Hiccough*, Malta, 1922.

[8] *Report of the Chief Government Medical Officer and Superintendent of Public Health for 1920–21*, Malta, p. K4.

[9] *Reports on the Public Health Department for 1924*, p. 4; *for 1926*, p. P2. *Report on the Health Conditions of the Maltese Islands for the year 1938*, p. x; *for 1949*, p. xii.

YELLOW FEVER

Before the discovery, in 1900, that yellow fever was transmitted by the mosquito *Aedes aegypti* the disease constituted one of the scourges of tropical and sub-tropical Africa. In the early decades of the nineteenth century it was also common in Spain, Portugal and Gibraltar and, as a precautionary measure, quarantine was enforced in Malta between 1817 and 1822 against ships coming from affected countries. Similar steps were taken in September 1870 when information reached Malta of the existence of yellow fever in Barcelona but the disease never appeared amongst us.[10]

TYPHOID FEVER

The distinction between typhoid and typhus fever, although accepted by some medical men, was not definitely settled by the mid-nineteenth century; indeed the term 'typhoid' was used to indicate that state of any disease marked by great prostration of the nervous system. Army Assistant Surgeon J. A. Marston, while in Malta in 1859, was among those who were convinced that the two forms of fever were separate diseases aetiologically, pathologically and clinically. During that year the garrison of Malta suffered severely from a typhoid epidemic and many opportunities occurred for the study of the morbid anatomy of the disease. Necropsy revealed, among other features, the characteristic ulceration of Peyer's patches.

Foci of the disease were known to exist in Valletta, Floriana and Sliema. It was observed that the spread of the illness occurred in the late summer with the first autumnal rains but the question of the causation of typhoid had not yet been solved. Some maintained that typhoid fever could generate itself spontaneously while others held that the spontaneous origin of the disease was a myth and that its cause was to be found in the 'ground infecting poisons' derived from the excreta of affected individuals, bad drainage and contaminated drinking water.[11] Subsequent developments in medical research fully justified these views.

TYPHUS

Typhus first visited Malta in 1855–56 during the Crimean War when a soldier suffering from the disease was admitted into the Military Hospital from a transport from the Crimea. The patient and one of his attendants died from the disease which was confirmed by the post-mortem appearances.[12] Typhus reappeared in April 1861 after an Egyptian vessel with several cases on board entered our harbour but the infection did not spread.[13] A number of cases, regarded as having been typhus, occurred in 1874 but it is not improbable that the eleven deaths attributed to this disease were actually due to typhoid.[14]

---

[10] *Repertorio di proclami dall'ottobre 1813 a giugno 1843*, vol. i, Malta, 1844, pp. 343 *et seq. Il Mediterraneo*, 24th September 1870, p. 8.

[11] Marston, J. A., 'Report on Fever (Malta)', *Army Medical Department, Medical Report for 1861*, London, 1863, vol. iii, pp. 486–499.

[12] *Ibid.*, p. 487.

No further outbreaks occurred until 1944 when the murine type of the infection was first recorded in Malta.[15] It was diagnosed in October, the number of cases increasing gradually until by the end of the year a total of sixty-five with three deaths was reached. The following year one hundred and thirty-four cases were reported, the incidence falling to thirty-five in 1946. The disease has remained endemic.[16]

---

[13] *Il Barth*, 25th July 1871, p. 3.

[14] Ghio, A., *Third Annual Report on the Mortality in Malta and Gozo for the year 1876*, Malta, 1877, p. 14.

[15] *Report on the Public Health Department for 1919–20*, p. I4. *Report on the Health Conditions of the Maltese Islands during 1932*, p. lxvi. *Report on the Health Conditions of the Maltese Islands for the year 1946*, p. iii.

[16] *Report on the Health Conditions of the Maltese Islands for the year 1944*, p. xiv; *for the year 1945*, p. xii; *for the year 1946*, pp. iii and xi; *for the year 1953*, p. 25.

PART V

THE EVOLUTION AND DEVELOPMENT OF PUBLIC HEALTH

CHAPTER 30

Public Health Administration

WHILE the Order of St. John of Jerusalem still had its seat at Rhodes, a code of laws designed to safeguard the health of the community from both local and extra-insular sources of danger was promulgated during the Grandmastership of Fra E. D'Amboyse (1503–12). These laws, based on the sanitary ideas of the time, were very comprehensive. They dealt with quarantine procedures, the notification of infectious diseases, the granting of burial permits, the control of leprosy, the issuing of licences for the practice of medicine and surgery, the fixing of a tariff of fees for medical practitioners, the sale of drugs and the responsibilities of apothecaries and medical men.[1] It appears that similar provisions were enforced by the knights immediately on their arrival in Malta (1530). A Health Commission was set up consisting of two knights who were responsible for shielding the Island from the introduction of disease from abroad. They formed part of the Complete Council which was one of the highest legislative assemblies of the Order. When epidemics threatened to invade the country, four Knights Grand Cross were joined in office with the ordinary two Health Commissioners.[2]

Other officials were charged with sanitary duties of a local nature. The island was divided into two districts each of which was governed by a municipal council known as 'Università' or Municipality. There was one such body—the most ancient of the two—for Mdina and the countryside; and another one for the towns of Birgu, Senglea and Bormla to which Valletta was later on added, when this body became known as the Valletta Municipality. The Island of Gozo had its own 'Università'. The officials of these councils were called Jurats. They were appointed yearly by the Grandmaster and performed various duties. Those who were entrusted with the supervision of the sanitation of their districts bore the title of 'Magistri Sanitatis'. Their number varied from time to time and very often they were medical men. In 1538 those for the Municipality of Birgu and adjoining towns were the Magnificus Joannes Calamia, a Rhodian; Magnificus Pedro Gallan, a Spaniard and Magnificus Alonso Predal who was the Protomedicus or Physician-in-Chief of the Island.[3]

As 'princeps medicorum', the physician-in-chief was at the head of the profession. He was usually one of the senior practitioners with a long medical experience and a man of outstanding abilities and personality. He was appointed to the post by the Grandmaster and was vested with the same jurisdictional prerogatives, rights and privileges enjoyed by his counterpart of the Kingdom of Sicily. All citizens and public officials were enjoined to obey his directives and to pay him the respect and homage due to his high position.[4] His duties included the visiting of passengers and sailors detained in quarantine and the inspection of 'susceptible' merchandise stored in the warehouses attached to the quarantine station and the supervision of burials of persons dying at the lazaretto.[5] He was also responsible for the examination and approval of apothecaries and for the licensing of medical practitioners after he had examined them and found them fit to exercise the profession.[6]

---

[1] Manuscript 153, fols. 42t, 71 and 73t. Manuscript 740, fols. 36–39, Royal Malta Library.

[2] De Boisgelin, L., *Ancient and Modern Malta*, London, 1805, vol. i, p. 275.

[3] Mifsud, A., 'I nostri consoli e le arti ed i mestieri', *Archivum Melitense*, 1917, iii. 41.

Following the demise of the Protomedicus Dr. P. P. Azzopardi on the 31st May 1764, the protomedical office was replaced by a Protomedical College composed of the three physicians and of the senior surgeon of the Holy Infirmary. By a decree of Grandmaster E. Pinto of the 3rd July of the same year the College was invested with the duties and powers previously exercised by the physician-in-chief.[7] The College was subsequently abolished and the post of Protomedicus re-established. This was not the first instance when more than one individual occupied the post simultaneously. Such an arrangement, for example, was in existence in 1575 when Dr. Jacobo Sebastiano Sala and Dr. Camillo Russo were appointed Protomedici for two years.[8]

During the brief French occupation of the Island all matters pertaining to public health were entrusted to a medical body known as the 'Jury de santé' (Collegio di Sanità) composed of the Maltese physicians Francesco Dimech, Giovanni Agius, Giuseppe M. Grech and Francesco Leon Gravagna and the surgeons Aurelio Badat and Saverio Micallef.[9] This body was very active in promoting street hygiene, issuing instructions for the proper burial of deceased soldiers and civilians and for preventing the interment of living persons who were only apparently dead.[10]

The Protomedicus again appears on the scene with the beginning of British rule in Malta. In the early years of the nineteenth century he was a member of the Municipality of Valletta until its abolition in 1818 by the Governor Sir Thomas Maitland. The post of physician-in-chief was, however, retained, its holder being still called Protomedicus and President of the College of Physicians as late as 1821.[11]

---

[4] Archives 436, fol. 273, Royal Malta Library.

[5] Archives 274, fol. 2, Royal Malta Library.

[6] Archives 464, fol. 386t, Royal Malta Library.

[7] Archives 568, fol. 160, Royal Malta Library.

[8] Archives 436, fol. 273, Royal Malta Library.

[9] Archives 6523c, fol. 443, Royal Malta Library.

[10] Archives 6523d, fol. 5, Royal Malta Library.

[11] Hennen, J., *Sketches of the Medical Topography of the Mediterranean*, London, 1830, p. 489.

The control of the sale of certain foodstuffs was among the measures taken by the Order of St. John to 'preserve the health' of its subjects. A decree of the 30th August 1658, for instance, prohibited the sale of unripe fruit which was deemed to be harmful 'to the human body as can be seen every summer when the people fall ill like flies and the indigent fill the hospital'.[12] A '*bando*' or decree of the 28th July 1722 disallowed the slaughtering of pigs, the sale of pork and the manufacture of sausages during the summer months within one mile's radius from Valletta and the three cities.[13] Other enactments regulated the sale of fish, the milling of flour, the baking of bread, the inspection of abattoirs and slaughtered animals by the Protomedicus,[14] but the awakening of a serious interest in the influence of the external material environment on the health of the community dates only from the opening years of the nineteenth century. There dawned the realisation that the investigation and correction of the various environmental factors affecting health constituted a distinct science by itself but before the protection of public health became the concern of specially trained medical men as it is to-day, it was entrusted to the District Medical Officers and the executive police. From this circumstance were derived the appellations of 'medical police' and 'police physicians'. This arrangement persisted for many years, the Chief of the executive police or his deputy being responsible to the government for the proper carrying out of various sanitary duties, except the enforcement of the quarantine laws and the administration of the lazaretto which were in the hands of an official known as the Superintendent General of Quarantine.

At the head of the Medical Police was the Police Physician of Valletta whose duty it was to inquire into every circumstance connected with the public health such as deaths, births and the incidence of diseases; the performance of necropsies in suspicious deaths and the examination of prostitutes. He inspected the fish, fruit and meat stalls at the market and paid an annual visit to all apothecaries in the Island to inspect their drugs and medicines. In addition to these duties he acted as Quarantine Physician visiting all ships and persons in quarantine and giving them pratique at the end of the prescribed period of detention.[15] Subordinate to him were the Police Physicians of the country districts who kept him informed about the state of the public health in their respective districts.[16] They also reported nuisances falling under their notice and carried out the measures for preventing the diffusion of infectious diseases. The duty, however, of inspecting shops for the detection of unwholesome food offered for sale and of preventing the accumulation of filth in houses and other places devolved upon the police, the Police Physician being only obliged to give advice when requested to do so.[17]

---

[12] Manuscript 439, fol. 364, Royal Malta Library.

[13] Manuscript 429, Bandi 1722–1736, fol. 13, Royal Malta Library.

[14] Manuscript 429, Bandi 1780–1784, fols. 27 and 141, Royal Malta Library.

[15] Richardson, J., Reports on the Laws of Malta, fol. 138. Dated 1826. Typescript in the possession of Dr. A. Ganado, LL.D., Valletta.

[16] Hennen, J., op. cit., pp. xxix and 467.

By 1863 various public health laws and police regulations had been evolved. They concerned street cleanliness and house drainage, the licensing of workshops in which there was the danger of explosions or of noxious exhalations, the keeping of pig-sties, the establishment of cemeteries and the burial of corpses, the protection of the water supply, the licensing of grocery shops and of bakeries, the sale of foodstuffs and the destruction of meat, fish, etc. found unfit for human consumption.[18] Reflective men, however, were not satisfied with the progress so far achieved. The need for an overhaul of the sanitary system was voiced during the administration of Sir Gaspard Le Marchant (1858–64). The government appeared prepared to carry out the necessary reforms but political agitation delayed them for a long time; thus although Ordinance V, contemplating important public health measures, was passed by the Council of Government on the 5th July 1858 it remained in abeyance until 1876.[19]

In a pamphlet published in 1867 Dr. C. Casolani proposed the setting up of a 'Sanitary and Statistical Department' as a first step in the reform of the sanitary conditions of the Island. One of the functions of this department was to be the publication of weekly returns of deaths giving the number and the causes of mortality and the nature of the illnesses prevailing in the country with remarks about them. No steps were, however, taken to implement this suggestion although Ordinance II of the 31st October 1862 had provided for the registration of births, marriages and deaths. A similar proposal for the formation of an 'Office of Social Statistics' came from the Comptroller of Charitable Institutions (Mr., later Sir, F. V. Inglott) in July 1868 but financial reasons formed an 'insuperable bar' to such a venture.[20] It must be noted, however, that the Inspector of Charitable Institutions had, as long ago as June 1852, been compiling 'Tabular Statements of the Progress of Endemic and Epidemic Diseases' from the reports sent to his office by the twenty-five dispensaries of Malta and Gozo. He hoped that these tables would, in the course of a few years, furnish him with data to elucidate the laws governing endemic and epidemic diseases by showing the 'successive visitations and intervals or their duration, extension and mortality in the various visitations, their association and sequence and their varying types'. In undertaking this work he was influenced by the fact that fully one-third of the mortality of these Islands was due to infectious diseases and by the conviction that the situation could be modified by hygienic and prophylactic measures which he considered to be the government's responsibility to carry out.[21]

---

[17] *Proceedings of the Select Committee on the Working of the Sanitary Office*, Malta, 1879, p. 37.

[18] Galton, D. and Sutherland, J., *Report of the Barrack and Hospital Improvement Commission on the Sanitary Condition and Improvement of the Mediterranean Stations*, London, 1863, p. 297.

[19] Casolani, C., *The Sanitary Question in Malta*, Malta, 1880, p. 12.

[20] Register of References to the Comptroller of Charitable Institutions, vol. viii, p. 75, Medical & Health Archives, Valletta.

In 1870 the Hon. R. Barbaro, an elected member of the Council of Government, pressed for the periodical publication of at least the return of deaths. The Crown Advocate, however, could see no usefulness in this measure as he held that the publication of the number of deaths on the occasion of the decennial census was sufficient. It was only after much insistence on the part of the representatives of the people that the Crown Advocate finally gave way and consented to the publication of these returns every fortnight.[22]

It is of interest to note that the first attempt to keep an official record of births and deaths goes back to 1798. At its session of the 30th July 1798 the Government Commission set up by Napoleon ruled that acts of births, marriages and deaths were to be recorded by the Parish Priests and that the registers were to be countersigned in duplicate by the judges of each municipality. At the end of the year the registers were to be deposited in the chancery of the Civil Tribunal. On the 24th August the duty of registering births, marriages and deaths was extended to other officials of the municipality. For the proof of birth a certificate from the doctor or midwife assisting at the birth was obligatory. It had to be presented within twenty-four hours under penalty of suspension from the practice of the profession and the infliction of a pecuniary fine and imprisonment. Strangely enough no medical certificate was required for proof of death, a declaration by a relative or friend and verification by a municipal official being sufficient. Interment was not to be allowed until twenty-four hours had elapsed since the occurrence of death.[23] What the French had tried to do became an accomplished fact only seventy-five years later.[24]

The years 1871–75 marked a period of achievement in several ways. Ordinance No. XI of 1871 made provisions for preventing the introduction and propagation of communicable diseases.[25] The standard of living was still low but it had started to show some improvement; in fact, although the Chief Police Physician opined that unemployment coupled with a high cost of living had an adverse effect on the health of the lower and middle classes, he found that poverty was not as great as it had been half a century earlier when country people were so destitute as to live constantly on barley bread of the worst kind.[26] A movement was on foot for the better ventilation of houses and hospitals, for the provision of an adequate supply of water for domestic purposes, for the abolition of lead plumbing in houses and for an improved sewage system;[27] legislation was enacted prohibiting burials in the churches of the three towns, while the much needed Sanitary Office came into being.

---

[21] Inspector's Letters to Government from 31st August 1850 to 13th October 1857, fol. 288, Medical & Health Archives, Valletta.

[22] Casolani, C., *op. cit.*, p. 13.

[23] Hardman, W., *A History of Malta*, London, 1909, pp. 94 and 98.

[24] *Il Barth*, 9th March 1872, p. 127.

[25] *Malta Government Gazette*, 9th June 1871, p. 111.

[26] Ghio, A., *Report on the Mortality in Malta and Gozo in the Year 1874*, Malta, 1875, pp. 7–8.

The question of the creation of a Sanitary Office had been reopened in 1873 by Dr. C. Borg[28] and raised again by the Hon. R. Barbaro in the Council of Government two years later (sitting of 17th February 1875). It was as a result of the efforts of this gentleman that the Sanitary Office finally came into existence. He, together with other elected members, declared that they would not vote one single farthing for sanitary purposes unless a Sanitary Office was first established and entrusted to a competent director under the guidance of an efficient English sanitary expert. The Crown Advocate at first opposed Barbaro's motion and in the ensuing debate, which lasted for three sittings, he tried to show that there was no need for a Sanitary Office. In his view the district medical service was equivalent to a sanitary department the only difference being in the nomenclature. He was also of opinion that the Police Physicians were fully qualified to perform all sanitary duties and, therefore, considered that the creation of a public health department was quite superfluous. But Barbaro held fast to his demands. Finally the Crown Advocate began to yield but he was only prepared to consent to the formation of a public health department on condition that it would be run on the lines laid down by him and under his immediate control. He refused to entrust it to a medical man as insisted upon by the elected members. The Crown Advocate's scheme, though opposed by the people's representatives, was approved by the Council by the bare official majority at the sitting of the 16th June 1875. The Sanitary Office was established a few days later in virtue of two government notices published on the 23rd of the same month.

The functions of the new department comprised: (a) the examination of articles of food and drink, (b) the inspection of markets and slaughter houses, (c) the removal of nuisances from houses and shops, (d) the investigation of the causes of infectious diseases and the prevention of their diffusion, (e) vaccination against smallpox, (f) the issuing of burial permits, (g) the keeping of registers of deaths and burials, (h) the recording of the incidence of diseases and mortality among animals, and (i) the publication of fortnightly medical statistics. The staff consisted of the Chief Sanitary Officer or Chief Police Physician and Inspector of Dispensaries and Cemeteries as head of the department; two Assistants, one for Malta and another for Gozo; a Sanitary Inspector who was a medical man; a District Sanitary Officer appointed from among the Police Physicians to each of the eleven sanitary districts of Malta and one more for Gozo; a Sanitary Engineer and his Assistant. The Professor of Chemistry at the University was *ex officio* the analytical chemist. There were a clerk and four overseers to supervise shops, stables, lodging houses and the execution of works for sanitary purposes.

---

[27] *Il Barth*, 6th March 1875, p. 473.

[28] *Il Barth*, 21st February 1873, p. 244.

From the outset, economic difficulties tended to stifle the growth of the new department. In fact, with a view to avoiding an increase in government expenditure, the new office was not made a separate department. It formed part of the Medical Police which was itself a branch of the Department of Executive Police under the Superintendent of Police. In this way the government was able to avail itself of the services of professional men and lay officials receiving salaries for other duties in other departments. The consequence of this arrangement was that some of the medical officers found themselves burdened with work that had no relationship with public health proper. The Chief Police Physician, his Assistants and the District Sanitary Officers, for instance, still continued to be charged with the older duties of attending sick paupers and supplying them with medicines. The Analytical Chemist had lectures to deliver at the University; the Sanitary Engineer was similarly engaged being the Professor of Physics and Mathematics, while the clerk was attached to both the office of the Charitable Institutions and the new department. When every building, large or small, had to be surveyed with a view to improving its sanitary arrangements the calls on these officers outside their sanitary duties retarded progress. Much of their time, too, was taken up by clerical work since the clerk lent to them could hardly devote more than an hour a day to the needs of the Sanitary Office.

The storm of public prejudice and hostility had also to be taken into account since at first the public failed to appreciate the value of sanitary reform. Complaints and suspicions regarding the innovations introduced in house construction by the Sanitary Office became so rife that a Select Committee was appointed in virtue of a resolution of the Council of Government of the 12th June 1878 to inquire into the works effected by the office since its inception in 1875. These complaints referred to the ventilators of house-privies and drains, the ventilators of public sewers and works said to have been ordered unnecessarily.

With respect to the first question there was nothing to be said against the principles adopted by the Office but 'in some cases the work done gave room to reasonable complaints if not owing to any real danger of disease by foul air issuing from these ventilators, on account, at all events, of the uneasiness that the proximity of their outlets causes in the minds of some of the occupants of neighbouring houses'.[29] This reaction was not confined to laymen only but was also shown by some medical men who looked upon drain and privy ventilators as an unnecessary and even pernicious innovation. They blamed them for causing typhoid and intermittent fevers. One of these doctors went so far as to declare that the whole theory of sewer ventilation was a sham—though he was honest enough to admit that he had never read and never wanted to read anything about the subject.[30]

---

[29] *Proceedings of the Select Committee on the Working of the Sanitary Office*, Malta, 1879, Appendix, p. 46.

As regards the ventilation of public sewers, this was not a measure for which the Office could be held responsible since it was originally recommended by Captain D. Galton and Dr. J. Sutherland in 1863 and carried out before the Office was created. Owing to lack of proper supervision some of the ventilating shafts had been erected in close vicinity to the windows of neighbouring houses or else were not raised to a sufficient height; as a result foul air and gases invaded the houses in the proximity of these defective ventilating shafts. The reaction against these ventilators was so strong that the cry was raised not only against the objectionable shafts but against sewer ventilation in general and the Sanitary Office in particular.

With reference to the third grievance, it is noteworthy that opposition came in the main from the proprietors of tenements who objected to the carrying out of sanitary works because of the expenses involved which, they alleged, were out of proportion to the small rent they received from their tenants. There is no doubt that the measures insisted upon by the Office were needed from the hygienic angle; in fact the Medical Board, after an inspection of houses in Valletta in 1878, informed the Governor of the notable improvement that houses which were in a most wretched condition before drainage works were effected in them had undergone following the execution of the sanitary improvements recommended by the Office. This was confirmed by the witnesses heard by the Select Committee, all the evidence showing that the works proposed by the Office and carried out in hundreds of buildings, far from being unnecessary, resulted in the improvement of dwellings chiefly by the removal of intolerable nuisances.

The Sanitary Office came out of this storm unscathed[31] but though it succeeded in weathering the seas of prejudiced criticism it was destined to founder on the rocks of financial stringency. In 1879 Sir Penrose Julyan, a Crown Agent for the Colonies, was sent to Malta by Her Majesty's Government to inquire into the working of the civil establishments of the Island and to ascertain whether a reduction in the expenditure of the public service was feasible. The cost of the Office was then £690 a year. Sir P. Julyan agreed that in the interests of the public health the department was doubtless necessary but he was very unfavourably impressed by its expenditure. This circumstance elicited from him some very interesting remarks which are worth quoting as they afford an illuminating indication of the attitude towards sanitary matters in the closing decades of the last century. In his estimation the Sanitary Office was an '*enfant terrible* among the organisations for spending money in

---

[30] *Proceedings of the Select Committee on the Working of the Sanitary Office*, Malta, 1879. Appendix, p. 43.

[31] *Memorandum Submitted to H.E. the Governor by the Crown Advocate on the Draft Ordinance 'To Amend the Police Laws'*, Malta, 1878, p. 13.

Malta' and represented 'rather more than the germ of a very large and costly addition to the number of Government Departments. The inordinate growth of this body should be restrained by all legitimate means.' The hope was expressed that it would not become a permanent establishment. While it existed, however, and until its ultimate fate was decided upon, Sir P. Julyan deemed it necessary to 'prevent its being converted into an unnecessarily heavy and cumbersome burden on the already overtaxed resources of the Island exchequer'. With this aim in view he recommended its annexation to the Department of Charitable Institutions and the keeping down of its expenses as much as possible.[32] As the financial argument has always been a strong deciding factor in controversial issues in Malta, Sir Penrose's warning was acted upon and the Sanitary Office was abolished under Ordinance No. VIII and Government Notice No. 102 of 1885.[33] By the same legal instruments the posts of Chief Government Medical Officer and Quarantine Medical Officers were created while the title of Police Physician was changed to that of District Medical Officer.

The Chief Government Medical Officer, who was also the Inspector of Hospitals, was not originally attached to any department but was directly responsible to the Lieutenant Governor and had his office at The Palace, Valletta. He was President of the Medical Board which dealt with questions referring to the Sanitary Laws and to the exercise of the medical and kindred professions and also tendered advice to the government during epidemics. Matters relating to quarantine and the public health remained within the province of the Board of Health.[34] The District Medical Officers continued to act as Sanitary Officers in their respective districts but were transferred to the Department of Charitable Institutions. The Sanitary Inspectors, the Inspector of Nuisances and the Analytical Chemist were attached to the Police Department of which they formed the Sanitary Branch while the Sanitary Engineer and the staff of sanitary overseers were placed under the direction of the Drainage Office.

The administration of the public health thus became entrusted to various departments, partly to the Superindendent of Police who was *de jure* the sanitary authority and who was charged with the duty of enforcing the sanitary laws; partly to the Drainage Commission which supervised the working of the drainage in the fortified towns; and partly to the Water Works Department which was responsible for the supervision of house drainage and reconstruction. These arrangements turned out to be complicated and costly; indeed a commission appointed in 1886 to report on the sanitary state of Mdina and Rabat did not fail to criticise the existing system and to recommend the consolidation of all functions connected with public health under one authority for the direction of the entire administrative machinery of sanitation including drainage works and the water supply.[35] However, in spite of the absence of a central co-ordinating authority, the impetus given to sanitary reform by the suppressed Sanitary Office continued to bear fruit. By 1887 the drainage of the towns had been remodelled, the sewers of porous rock being replaced by glazed earthenware pipes; house drainage was improved and the supply of water increased and rendered wholesome. Greater cleanliness was enforced everywhere; cellars and underground dwellings were no longer allowed to be occupied by either man or beast—a measure that reduced the number of animals in the towns to a considerable extent. In the villages, however, sanitation was still of a primitive kind especially in the matter of housing conditions, water supply and sewage disposal.[36]

---

[32] Julyan, P. G., *Report on the Civil Establishments of Malta*, London, 1880, p. 31.

[33] *Malta Government Gazette*, 17th September 1885, pp. 331 and 335.

[34] *Ibid.*, p. 334.

The Public Health Department was revived in 1895 with the Chief Government Medical Officer at its head. It comprised the Sanitary Branch, the District Medical Service, the Drainage Branch and the Veterinary Service.[37] From this year dates the series of annual reports issued by the Department about the health conditions of the Maltese Islands.[38]

Following the constitution of the Public Health Department, the revision and consolidation of the sanitary laws was taken in hand but strong opposition was met with from the Chief Secretary to the Government; indeed the First and Second Sanitary Laws, which were published in draft form on the 30th May 1899, were not promulgated until October 1900 and May 1901 respectively.[39] Thus the years 1900–08 mark the period during which the foundations of present-day sanitary legislation were laid. These laws covered much the same ground as English public health ones but some of the Maltese ordinances were more stringent.[40] The First Sanitary Ordinance of 1900 dealt with the reorganisation of the department. It vested the Chief Government Medical Officer with the duties of Superintendent of Public Health and provided for the substitution of the Board of Health by a Council of Health composed of civilian, military and naval officials and charged with the duty of advising the Head of the Government on matters concerning the public health; for the constitution of a Medical Board for ascertaining the suitability of persons applying for a licence to practise the medical profession; for the division of the two Islands into sanitary districts under the direction of the Medical Officers of Health; for the appointment of Sanitary Inspectors and for the supervision of markets. It also specified the duties of the

---

[35] Chadwick, O., Schinas, G. C., and Agius, P. P., *Report on the Sanitation of Notabile and Rabato*, Malta, 1887, p. 7.

[36] Pisani, S. L., *Report on the Cholera Epidemic in the Year 1887*, Malta, 1888, p. 17.

[37] *Malta Government Gazette*, 10th April 1895, p. 370.

[38] *Report for the Public Health Department for 1922*, p. 1.

[39] *Times of Malta*, 6th September 1940, p. 2.

[40] *Report of the Commission for the Investigation of Mediterranean Fever, Part II*, London, 1903, p. 11.

District Medical Officers, District Midwives and Quarantine Medical Officers.[41]

The Second Sanitary Law, embodied in Ordinance XVII of 1901, concerned the practice of the medical and allied professions and laid down the duties of medical practitioners and the regulations regarding the preparation and sale of medicines in dispensaries.[42] The Third Sanitary Ordinance was enacted in 1904; it dealt with the conditions of importation, selling and preparation of food, the examination of drinking water by the health authorities, the inspection of slaughtered animals and the supervision of dairies.[43] The Fourth Sanitary Ordinance of 1908 consolidated and amended the laws for preventing the introduction and spread of infectious diseases affecting men and animals. It enforced the notification of various diseases, the isolation of patients suffering from certain infectious illnesses, the disinfection of premises and the exclusion of sick persons from certain occupations. It also regulated the burial of corpses, the performance of vaccination and the slaughtering of diseased animals.[44]

An index of the progress achieved in sanitation just before the outbreak of the First World War is to be found in the declining general death rate from thirty-six per thousand persons living in 1874 to nineteen;[45] in the low mortality from tuberculosis (0·78 per thousand) and from typhoid (0·11 per thousand).[46] The Public Health Department had justified its existence. It was also destined to absorb within its framework the much older Department of Charitable Institutions. In 1936 His Excellency the Governor recommended to the Secretary of State for the Colonies the amalgamation of the medical branches of the Charitable Institutions with the Public Health Department and their direction to a medical man. This suggestion was acted upon and in October 1937 the First Sanitary Ordinance of 1900 was repealed by Ordinance XXX which merged the offices of the Charitable Institutions and of the Public Health into one department called the Medical and Health Department. The Chief Government Medical Officer besides being the Superintendent of Public Health was vested with the management of the hospitals and the District Medical Service. The Senior Health Officer and the Senior Medical Officer were appointed his chief assistants, the former being the executive officer for health administration and supervision of the sanitary laws; and the latter being entrusted with medical administration and the organisation and staffing of hospitals. The Quarantine Medical Officers had their designation changed to that of Port Medical Officers.[47]

[41] *Government Gazette Supplement*, 9th October 1900, Ordinance XIV, no pagination.

[42] *Governement Gazette Supplement*, 2nd July 1901, Ordinance XVII.

[43] *Government Gazette Supplement*, 26th March 1904.

[44] *Government Gazette*, 10th July 1908, Ordinance VIII.

[45] Ghio, A., *Report on the Mortality in Malta and Gozo for the Year 1874*, Malta, 1875, p. 3.

[46] Bernard, A. V., 'The Health Conditions of Malta', *Daily Malta Chronicle Special Eucharistic Congress Number*, April 1913, p. 44.

[47] *Government Gazette Supplement*, 30th October 1937, Ordinance XXX.

The main change that resulted from this reform was that the health and medical services of the Island came under the control of a medical man. It is worth recording that the Governor's suggestion to bring these services under the management of a professional man was not the first of its kind. In its survey of the administration of the Charitable Institutions in 1848 the 'Societa Medicà d'Incoraggiamento' expressed the view that the lay committee which then directed the medical institutions was not capable of discharging all the duties of hospital administration. A proposal was, therefore, put forward to abolish this committee and replace it by a board formed of three doctors, outside government employment, and an accountant. This suggestion fell on deaf ears.[48] The desirability of bringing the government hospitals under the supervision of a medical inspector was voiced in July 1870 but His Excellency the Governor, Sir Patrick Grant, considered that the hospitals were well conducted under the Comptroller of Charitable Institutions. He, therefore, turned down the idea. He not only deprecated 'unnecessary innovations' but maintained that 'Let well alone' was an excellent maxim.[49] The question was again raised in September 1871 by Prof. Gavino Gulia in an editorial in *Il Barth* when he urged the amalgamation of all medical departments under one head[50] but it was sixty-seven years before Sir Patrick Grant's decision was reversed.

---

[48] *Storia della Società Medica d'Incoraggiamento di Malta*, Malta, 1845, p. 200.

[49] Register of References to Comptroller of Charitable Institutions, vol. xi, p. 42, Medical and Health Department, Valletta.

[50] *Il Barth*, 5th September 1871, p. 25.

CHAPTER 31

Quarantine

THE quarantine system originated in the ports of the Mediterranean Sea to which it remained almost entirely confined until the first half of the nineteenth century.[1] As incubation periods of various epidemic diseases became known, regulations were devised fixing the duration of quarantine and making it obligatory on ships' captains to produce a bill of health issued by their consuls or by the authorities of the port of departure. These measures were enforced by several European nations by the beginning of the eighteenth century although not without opposition on the part of the 'non-contagionists' and their adherents. The object of quarantine was to prevent the introduction of 'contagious' diseases, more particularly plague, on the supposition that certain diseases were propagated in uninterrupted succession from one person to another. Other ideas were entertained, apart from this theory of personal contact, with regard to the conveyance of plague. It was known that the disease could gain a foothold through the importation of contaminated merchandise, and goods were divided into two classes—the susceptible class including those substances believed to be capable of receiving, retaining and conveying the 'contagion' such as cotton, wool, silk, hemp and leather; and the non-susceptible class which did not possess this property such as wood, metals and glass. It was, moreover, held that 'contagion' could remain latent in the living body but only for a limited period of time.[2]

Quarantine measures were enforced in Malta during the Middle Ages. Their administration was in the hands of public officers appointed by, and answerable to, the Municipality of Mdina. As, however, the jurisdiction over the Island was, in those days, shared with the 'castellano', who had his seat in Fort Sant'Angelo in the Grand Harbour, it sometimes happened that through an abuse of authority the 'castellano' gave pratique to vessels detained under quarantine or else impeded others from leaving port. The Municipality protested with King Alfonso of Spain against these encroachments on its rights and the king, by a diploma of the 22nd February 1458, limited the jurisdiction of the 'castellano' to the precincts of the Fort and confirmed the Municipality in its role of sole guardian of the public health.[3] Ships suspected of harbouring infection were directed to Marsamxett Harbour which became known as the Quarantine Harbour. Persons caught trafficking with these ships were, according to a decree of 1526, condemned to the paying of a fine, the confiscation of their goods and the burning of their homes.[4] As an additional safeguard against the introduction of infected merchandise into the Island, Custodians of the Ports were posted along the coasts where ships were likely to land cargo.[5]

---

[1] Davy, J., *Notes and Observations on the Ionian Islands and Malta*, London, 1842, p. 323.

[2] *Ibid.*, p. 323.

When the Knights of St. John came to Malta they applied the quarantine laws and procedures which they had evolved during their stay in Rhodes. These laws underwent many modifications and elaborations in conformity with changes in medical thought until they came to form an important chapter in the Island's legal code.[6] No ship was allowed to disembark passengers, crew or goods before she was granted pratique by the port sanitary authorities. Disregard of this rule involved the culprit in the death penalty if the ship came from an infected place. Those persons, too, who knew of such a breach of the regulations and who failed to report it to the authorities were condemned to life imprisonment as oarsmen on board the galleys. Infected vessels were allowed to anchor only in certain specified areas of the harbour. In rough weather they were permitted to moor off 'the post of Castille' in the Grand Harbour or behind Senglea near Kordin. In fair weather they were obliged to proceed to Marsamxett Harbour where they were prohibited from approaching other ships or communicating with them. All the merchandise had to be brought ashore at the lazaretto for disinfection. Passengers and crew together with their personal belongings were to be depurated—first on starting the period of quarantine and again two days before the expiration of this period.

Two kinds of quarantine were performed, either the so-called petty quarantine for ships with clean bills of health and lasting eighteen days or else the great quarantine for ships with foul bills of health. Ships in quarantine were guarded by the boats of the sanitary authority to prevent communication with the shore. Unauthorised persons caught in the Quarantine Harbour or trying to communicate with the ships incurred very severe punishments ranging from the imposition of a heavy fine to the death penalty. Fishermen were not allowed to enter quarantine waters[7] while women who tried to get in touch with men on ships undergoing quarantine were banished from the cities of Valletta, Birgu and Senglea for a period of five years; if the women happened to be prostitutes they were exiled from the Island.[8]

---

[3] Eton, W., *Authentic Materials for a History of the Principality of Malta*, London, 1807, p. 115.

[4] Vassallo, G. A., *Storia di Malta*, Malta, 1854, p. 253.

[5] *Ibid.*, p. 254.

[6] *Leggi e costituzioni prammaticali*, Malta, 1724, p. 94. *Del Dritto Municipale de Malta*, Malta, 1784, p. 276.

[7] Manuscript 429, Bandi 1765–72, fol. 87, Royal Malta Library.

[8] Manuscript 740, fol. 173, Royal Malta Library.

The Order's own ships were also subject to quarantine. In those days it was not unusual for the galleys to enter harbour with wounded men on board following some encounter with Turkish and pirate ships. Arrangements were made for the wounded men to receive surgical treatment at the lazaretto while undergoing quarantine. A surgeon from the Holy Infirmary was transferred for this purpose to the lazaretto whenever the need arose; as this contingency brought him in close contact with the crew and passengers, he too was kept confined in the lazaretto until their period of quarantine was over.[9]

No regard was paid to personal liberty, property or international commerce once there was the possibility that disease, especially plague, could be introduced into the Island. In October 1744 plague was raging in Messina and, in order to prevent anyone from disembarking in Malta from that port, strong guards were posted round the shores of the Island. All sailors on the ships already in harbour were ordered to remain on board as an additional precaution. An English sailor, however, insisted on going ashore in defiance of this order and he was shot dead by the sentinel on guard.[10] Passengers absconding from the quarantine establishment were not unknown. The escapees, in their endeavour to avoid capture by the police, took refuge inside the churches where the civil authorities had no jurisdiction as the churches then enjoyed the privilege of sanctuary. To discourage these escapes from the lazaretto the privilege of sanctuary for persons trying to evade quarantine was abolished in 1749.[11]

In the spring of 1781 the thoroughness of the quarantine measures taken in connection with a plague-infected Venetian ship by the Maltese port authorities involved the Venetian Republic and the Order of St. John in a war with the Bey of Tunis. The vessel entered Marsamxett Harbour but when it was hailed by the guard on St. Elmo point and subsequently approached by the boat of the Health Office none of the crew was to be seen. The ship was boarded by a health guardian of the lazaretto. He found only one member of the crew on board. This sailor, who was very gravely ill, told the guardian that the rest of the crew had perished of plague and that their corpses had been thrown into the sea. An urgent meeting of the Health Council was summoned by the Grandmaster to deliberate on the measures to be taken to safeguard the public health and save the life of the plague-stricken sailor. The council decided to send two doctors on board the ship one of whom had to be well versed in medicine and surgery and to possess the necessary experience in the treatment of plague. The choice fell on a certain Stefano Borg. He was granted a liberal remuneration for his work but he was warned that he had to be prepared to sacrifice his own life in the execution of his duty—in which eventuality his family was to be adequately compensated. He was entrusted with the removal of his patient to the lazaretto where he himself had to remain until the man died or recovered; in either case he was to stay in the lazaretto until he had served a quarantine of eighty days. Borg had the patient plunged, quite naked, into the sea for three consecutive times and then had him wrapped in a sheet and conveyed to the lazaretto. There the sick man was given sugared wine and allowed to sleep for three hours after which his buboes were incised. We are in the dark as to whether the patient recovered or not but we know that Borg came out of this episode safe and sound and was still alive in 1801.[12] The fate of the ship did not have such a smooth ending. Three suggestions were proffered by the Council of State with regard to her disposal: (a) to sink the ship in one of the bays round the coast and to leave it submerged for a certain period of time, until it was purified of its 'contagious miasma', and afterwards to refloat it and return it to her owners; (b) to disinfect the vessel by opening all apertures to allow a free circulation of air, the whole operation to be carried out by forty or fifty slaves or convicts; and (c) to tow the ship to the open sea and set it on fire under the supervision of a guard of fifty men under the command of a knight to ensure that no one approached the ship or tried to possess himself of any of her cargo that escaped destruction. This last proposal was approved by the Council and carried into effect with the consent of the Venetian Government. The owners of the merchandise, who were subjects of the Bey of Tunis, claimed compensation for their cargo; but the Order declined to indemnify the merchants on the ground that in destroying the ship with her cargo the Order had only acted 'in the general interests of humanity'. The Bey then turned to Venice but as the Republic also refused to pay compensation he declared war on Venice and in the space of less than a month he had captured fourteen Venetian ships and sold their crews into slavery. The combined fleets of Venice and of Malta were sent to attack Tunis but they were met by such murderous fire from the shore batteries that they were forced to retreat and return to Malta. Eventually, seeing the impossibility of subduing the Bey, Venice consented to pay him the compensation asked for and peace was re-established.[13]

---

[9] Cassar Pullicino, J., 'Michel'Angelo Grima chirurgo maltese del settecento', *Rivista di storia delle scienze mediche e naturali*, 1949, xi. 23.

[10] Reboul, G., *Giornale de' successi dell'isole di Malta e Gozo*, Malta, 1939, p. 65.

[11] Manuscript 429, Bandi 1744–56, fol. 97, Royal Malta Library.

In June 1784 a Maltese vessel suspected of being infected was destroyed by fire with all goods on board after her crew and passengers were ordered to strip naked and wash themselves in sea water before they were taken ashore to the lazaretto.[14] The following incident shows that no risks were taken even when the possibility of 'contagion' was only remote. In November 1748 seven corpses were found on the coasts of Gozo following the shipwreck of a foreign vessel on those shores. That Island was put in quarantine by the Maltese sanitary authorities and letters from Gozo to

---

[12] Manuscript 183 Università, fol. 32, Royal Malta Library.

[13] Doublet, P., *Mémoires historiques sur l'invasion et l'occupation de Malte*, Paris, 1883, p. 73.

[14] Archives 274, fol. 20, Royal Malta Library.

Malta were submitted to disinfection 'as if they came from the levant or from some other place suspected of pestilence'.[15]

The English traveller, P. Brydone, who visited Malta in 1770, has recorded the manner in which ships coming from clean ports were received by the port authorities of Malta. 'The entry into the port', he says, 'is very narrow and is commanded by a strong castle on either side. We were haled [*sic*] from each of these and obliged to give a strict account of ourselves; and on our arrival at the side of the key [*sic*] we were visited by an officer from the health-office and obliged to give oath with regard to the circumstances of our voyage. He behaved in the civilest manner and immediately sent us Mr. Rutter, the English Consul, for whom we had letters of recommendation.'[16] Another visitor to Malta in 1777 gives us more details as to the procedures followed. Every passenger was carefully interviewed under oath and if he gave any false information he was hanged on the spot on a gallows that was kept ready for the purpose. Crews and passengers that were allowed to remain on board while undergoing quarantine were fumigated twice a day with aromatic herbs and drugs. A passenger who was submitted to this 'smoking' in 1810 has left us a very lively description of the procedure. 'The man from the (quarantine) office had brought some things with him', he says. 'We were, all hands, men and women and children, soldiers and sailors, ordered down into the hold when the hatches were closed. Then our friend from the shore took a match and ignited certain ingredients which soon began to smoke and every chink and corner was filled; one of the children going into fits and all of us half-suffocated. We made a rush, got upon deck and were kept coughing and sneezing all the evening. I never wish to be disinfected again.'[17]

Merchandise, too, was smoked and aired before it was taken away from the quarantine station while letters were slit open and fumigated in a cupboard; as an additional precaution some of the papers were also given a bath of vinegar.[18] There were no lazarettos in England and ships proceeding to Great Britain from Turkish ports were obliged by an act of the British Parliament to perform quarantine at Malta and other Mediterranean ports before they were allowed to land their cargo in any part of Great Britain or Ireland.[19]

The French interlude in our history at the end of the eighteenth century brought about a division of the Island into the harbour area controlled by the French, and the countryside which remained in the hands of the insurgent Maltese and their allies. The Order's quarantine arrangements based mainly on the ports of Marsamxett were consequently disrupted but each side in the conflict took immediate steps to establish its own quarantine measures. On the 13th June 1798 Napoleon invested the government of the Islands in a commission of nine persons who, besides the general administration of Malta and Gozo, were also charged with the superintendence of all measures safeguarding the public health. In a decree published three days later it was enacted that these public health measures were to be 'neither more nor less rigorous than those existing at Marseilles'. Plans were projected for a new lazaretto for the French troops as the existing one at Manoel Island was incapable of dealing with the increased number of soldiers on the Island. The upheaval, however, that followed Napoleon's departure from Malta prevented this scheme from being carried out.[20] The ports occupied by the Maltese were those of St. Paul's Bay and of Marsaxlokk and for each of these a Sanitary Deputy was appointed to see that the old laws of the country were adhered to. All Gozitan boats were made to pass through these ports to pay customs dues and obtain pratique.[21]

---

[15] Reboul, G., *op. cit.*, p. 106.

[16] Brydone, P., *A Tour through Sicily and Malta*, London, 1776, p. 333.

[17] Shaw, C., *Malta Sixty Years Ago*, London, 1875, p. 22.

[18] Dessoulavy, C. L., 'Visitors to Malta from the 15th to the 18th Century', *The Sundial*, 1940, iii. 105.

[19] Howard, J., *An Account of the Principal Lazarettos in Europe*, London, 1789, p. 26.

As soon as the British occupied Malta after the expulsion of the French they entrusted Mr. W. Eton with the re-establishment of the ancient quarantine system. Mr. Eton was not new to Malta; in fact he had been here during the time of Grandmaster E. De Rohan (1775–97) and had spent fifty days of his three months' stay in Malta in quarantine at the lazaretto.[22] At this period it was hoped to draw a great part of the trade of the Mediterranean and of the Levant to Malta and Lord Hobart, the Secretary of State for War and the Colonies, aimed at rendering the performance of quarantine as efficient and as secure as possible. With this aim in view the Civil Commissioner, Mr. Charles Cameron, was instructed to give Mr. Eton every assistance in his power while Eton was enjoined to apply the quarantine regulations of the Order and to carry out such improvements as he thought fit.[23] The officers entrusted with the enforcement of the quarantine regulations were the Superintendent of Quarantine, the Captain of the Quarantine Harbour and the Captain of the Lazaretto.

Eton started his duties on the 14th July 1801 but he soon discovered that he had to perform another task besides the superintendence of the quarantine regulations. At the dawn of the nineteenth century the international political situation was very unsettled. During the discussions between England, France and Spain that preceded the signing of the Treaty of Amiens on the 27th March 1802, the French representatives had proposed the re-formation of the Order of St. John of Jerusalem into an Order of Hospitallers 'conformably to its primitive institution'. They also suggested the demolition of the fortifications of Malta and the conversion of the Island into a huge lazaretto for the use of all the different nations trading in the Mediterranean Sea and in the Levant. The British Government, however, favoured the restoration of the Island to the Order under the same conditions on which the knights had held Malta before the war and they, therefore, rejected the French proposals.[24] For many years the political fate of the Island remained in the balance. For this reason it was feared that the presence of partisans of the Order and of the French in Malta might lead to trouble. To prevent the landing of such undesirable persons in the Island a rigorous 'screening' was enforced through the quarantine office—a department that possessed great powers since breaches of its regulations could still be punished by the death penalty without benefit of clergy.

---

[20] Hardman, W., *A History of Malta*, London, 1909, pp. 79, 82 and 128. *Collezione di bandi*, Malta, 1840, pp. 132, 133 and 181.

[21] Azzopardi, V., *Raccolta di varie cose*, Malta, 1843, p. 197.

[22] Hardman, W., *op. cit.*, pp. 495–497.

[23] *Ibid.*, pp. 356–357.

As incoming letters were regarded as potential vehicles of infection they were required to pass through the quarantine station for disinfection; here they were not handled but were received from the ships by means of iron tongs. They were then dipped in vinegar and afterwards laid for a quarter of an hour on a wire grating under which straw and perfumes were burnt,[25] after being chiselled or incised with a knife. In the slits thus formed wooden wedges were introduced to allow the penetration and easy circulation of the fumes among the papers. The fumigating mixture was composed of common salt, manganese and an aqueous solution of sulphuric acid,[26] while specially constructed cupboards and implements were provided for carrying out the fumigation.[27] Purified letters and packages were marked with a handstamp bearing the inscription '*Purifié au Lazaret. Malte*'—French being then the commercial language of the Mediterranean basin. This mark does not appear to have been used after the 1880s but it is interesting to note that—as a very exceptional circumstance—disinfection of letters by the Maltese health authorities was carried out as recently as 1929 when correspondence from Tunis was thus treated during a plague epidemic in that country.[28]

Thanks to the fumigation of letters the government had an excellent opportunity to scrutinise the contents of all incoming correspondence; in fact the information so obtained when found detrimental to the public weal was acted upon 'without scruple'. Thus the Superintendent of the Lazaretto found himself not only the guardian of public health but also the administrator of a counter-espionage service.[29]

This was not the first time that quarantine was used for political ends.

---

[24] Hardman, W., *op. cit.*, p. 433.

[25] Howard, J., *op. cit.*, p. 8.

[26] Minutes of the Board of Health from 14th March 1832 to 31st December 1856, Medical & Health Archives, Valletta.

[27] Bussolin, G., *Delle istituzioni di sanità marittima nel bacino del Mediterraneo*, Trieste, 1881, p. 343.

[28] Galea, J., Disinfection of Mail at Lazaretto, Typescript, Malta, 1946, Royal Malta Library.

[29] Hardman, W., *op. cit.*, p. 495.

When the British and French fleets were chasing each other in the Mediterranean in the mid-eighteenth century and both nations were making use of Maltese harbours, their crews often fought in the streets of Valletta. To avoid these disturbances, and also to avert in time any surprise attack on the Island on the part of British warships, the Grandmaster kept the belligerents from the Island's harbours by denying them pratique on the plea of quarantine.[30] This was in 1759. The quarantine machinery was once more put to political use by the government in 1823 after the enactment of the law suppressing slavery. Since all passengers arriving in Malta had to pass through the Quarantine Station its officers were instructed to inform travellers' servants suspected of being slaves that on landing in Malta they became free men and women in virtue of the new legislation.[31]

Towards the end of the first decade of the nineteenth century Malta became the centre of Mediterranean trade. A constant commercial intercourse was kept up with Leghorn, Trieste, the Barbary States, Egypt, Constantinople, Smyrna and the Ionian Islands. An indication of the volume of trade at this period is to be found in the marked increase of the number of Maltese vessels which from one hundred and sixty-five bottoms in 1803 rose to eight hundred and forty in 1811. England and France were at war and all the French territories were blockaded by the British navy. All vessels, therefore, irrespective of nationality were obliged to call at Malta to obtain a licence exempting them from capture by British ships.[32] Not to hamper this commercial activity, the quarantine laws were not maintained with their traditional strictness.[33] The abolition of the Board of Health increased the anxieties of those who had already viewed the relaxation of the quarantine laws with serious misgivings. This Board had been created on the 4th November 1804 to allay the fears of the population when the rumour gained ground that an invasion of the Island by disease was impending owing to the unhealthy state of many of the Mediterranean ports at the time.[34] This Board had maintained a constant correspondence with quarantine stations in the Mediterranean and, through its scrupulous adherence to regulations, had gained a reputation for inflexibility and impartiality. Following its abolition the quarantine rules were conducted upon such 'partial and unjustifiable principles' that the duration of restraint, or even exemption from it, depended solely on the rank or circumstance of the individual concerned. Such abuses eventually became known to the health authorities of the various continental ports with which Malta had commercial relations. As some of these countries had an interest in the diversion of the flow of trade from these islands to their own ports they were only too eager to take advantage of the imperfect application of the quarantine laws in Malta constantly to exclude the Island's ships from their harbours with consequent damage to its trade and prosperity.

---

[30] Mifsud, A., *Knights Hospitallers of the Venerable Tongue of England in Malta*, Malta, 1916, p. 275.

[31] Minutes of the Board of Health from 14th March 1832 to 31st December 1856, Medical & Health Archives, Valletta.

[32] Laferla, A. V., *British Malta*, vol. i, Malta, 1938, p. 74.

[33] *La Rivista*, 1st March 1847, p. 241.

[34] *Collezione di bandi*, Malta, 1848, p. 94.

To the disregard of the quarantine measures was attributed the introduction of plague in Malta in 1813. In their petition of 1821 addressed to the House of Commons of the United Kingdom, the Maltese stated that had the local government listened to the urgent representations of the Board of Health plague would not have invaded the Island or at least its progress would have been quickly checked as the measures recommended in the first instance by the Board were the very same ones which it was found necessary to apply after experience had shown the inefficacy of the measures adopted by the government in dealing with the epidemic.[35] Following the extinction of the plague epidemic the quarantine laws were tightened up and ships undergoing quarantine at Malta on their way to the United Kingdom from the east were allowed to discharge their cargo without restrictions on reaching British ports.[36] Sir Thomas Maitland, who was then Governor of Malta, established very severe penalties for the infringement of these laws though he himself did not hesitate to disregard them when it suited him. In fact when he returned to Malta from Tunis on the 8th December 1815 he landed from his ship and went straight to his official residence without subjecting himself to any quarantine restrictions.[37] Threats of retaliation by a foreign power against Maitland's rash act resulted in a stricter and more thorough enforcement of the regulations so that not even royalty could claim and obtain exemption from them. Thus when a royal personage touched at Malta in 1816 on her way to the Holy Land she was placed under strict restraint and, in fact, nearly lost her life when her boat, though bearing the royal standard, was fired at 'for a slight and, there is no doubt, an unintentional breach of regulations'. Having remained in port for a few days, Her Majesty eventually left Malta without being admitted to pratique. The fate so narrowly escaped by the queen actually befell a Neapolitan officer in 1817. He was in charge of a flotilla of fishing boats moored in the quarantine harbour. Once while inspecting these boats after sunset—which was against the quarantine regulations—he was shot at by the guard and killed.[38]

Some of the political leaders were not satisfied that the public health was being adequately safeguarded. In 1821, therefore, they demanded the re-establishment of the Board of Health with the primary object of renewing the correspondence formerly kept up with continental lazarettos and of ensuring that not even the slightest infringement of the quarantine laws would be permitted. The aim behind this demand was to prevent foreign powers from subjecting Malta to constant quarantine to the detriment of its trade and prosperity.[39] The Board of Health was belatedly re-established on the 5th April 1826. It was composed of His Excellency the Governor as President, the Chief Secretary to Government, the Superintendent of Quarantine, a member of the Maltese nobility, the principal medical officer of the Civil Hospitals and a local merchant. The Board met once a week but when infected vessels were in harbour it assembled every day.[40] It fixed the duration of quarantine to conform with the periods established by other lazarettos in the Mediterranean with which the Board was in correspondence. From 1829 regular registers of persons undergoing quarantine at the lazaretto were kept.

---

[35] Manuscript, The Humble Petition of the Undersigned Merchants and Inhabitants of the Island of Malta, 1821. In the possession of Dr. A. Ganado, B.A., LL.D., Valletta.

[36] *Malta Government Gazette*, 16th November 1814.

[37] *La Rivista*, 1st April 1847, p. 276.

[38] Manuscript, The Humble Petition, etc.

It appears that for a time the quarantine department gave no cause for complaint. Evidence of the rigidity with which the laws were being applied at this period has been recorded by travellers who came to Malta in the early thirties. In 1830 Lady Georgina Walpole, daughter of the Earl of Oxford, found herself quite unexpectedly detained inside the lazaretto in consequence of an unconsidered act on the part of her husband Joseph Wolff. Wolff, traveller and missionary, returned to Malta after one of his usual absences and was undergoing quarantine at the lazaretto. Lady Georgina, who had remained in the Island, went to see him from behind the grille. Delighted at her appearance, he rolled up his handkerchief and flung it at her. The health guards protested against this demonstration of conjugal love for they considered that by coming in contact with the handkerchief Wolff's wife had exposed herself to the possibility of infection. They, therefore, insisted on her following her husband into quarantine—which she had to do.[41] A further instance of inflexibility comes from the pen of Sir Walter Scott who arrived at Malta on the 22nd November 1831. 'In entering the harbour', he wrote to a friend at Edinburgh, 'a seaman was pushed from our yard arm. He swam strongly notwithstanding the fall, but the Maltese boats, of whom there were several, tacked from him to avoid picking him up, and an English boat, which did take the poor man in, was condemned to ten days' imprisonment to reward the benevolence of the action.'[42]

The Londoner George French Angas describes the way ships were dealt with by the quarantine officers. He reached Malta in September 1841. 'When we arrived in the harbour', he says, 'the health officer came alongside and took our ship's papers in a pair of tongs. After asking us the usual questions we were ordered to the Pratique-office where we stood guarded by a wooden barrier for some time till at length we got pratique and were permitted to enter the city (Valletta). The barrier was then removed and the officers shook us cordially by the hand.'[43] The papers alluded to consisted of a deposition made on oath by the captain regarding the health of his ship, the bill of health released by the authorities of the port of departure and a medical certificate of the state of health of the crew and passengers.[44]

---

[39] Mitrovich, G., *The Cause of the People of Malta*, London, 1836, p. 37.

[40] Holroyd, A. T., *The Quarantine Laws—Their Abuses and Inconsistencies*, London, 1839, p. 38.

[41] Festing, G., *John Hookham Frere and His Friends*, London, 1899, p. 280.

[42] Lockhart, J. G., *Memoirs of the Life of Sir Walter Scott*, London, no date, vol. ii, p. 332.

Ships with foul bills of health were moored at Ta Xbiex opposite the lazaretto while those performing a short quarantine lay under the bastion of Sa Maison in Marsamxett Harbour. A branch of the Quarantine Office existed in the Grand Harbour on the beach below the heights of Kordin. Here heavy ships of war and merchant vessels unable to enter Marsamxett Harbour, because of rough weather, performed their quarantine.[45] A 'Parlatorio' for the convenience of the naval squadron was opened in this part of the quay in 1826. If a ship had cases of plague on board, she was emptied of her cargo and all her port-holes and hatches were opened to allow the flushing of its interior with air. The plague-stricken persons were transferred to the Plague Hospital for treatment while the rest of the passengers and crew were confined in the lazaretto. Here they were given a fresh set of clothing after their own clothes had been soaked in water and their bodies thoroughly washed with vinegar and water. They were then divided into small groups and each group given a separate room to prevent the 'contagion' from spreading. If, after a fortnight, no fresh cases of plague appeared the passengers and crew were collected into one group to spend another forty days of isolation. In the meantime the ship was washed with lime and water, painted and disinfected with fumigations.[46]

The procedure followed when vessels with cholera cases arrived in the Island was different. These ships were either directed to St. Paul's Bay with their passengers and goods or else they were kept cruising outside the Grand Harbour until ten days had elapsed from the last case occurring on board.[47] Similar measures had been adopted in 1821 in the case of ships arriving from Spanish ports when an outbreak of yellow fever occurred in various parts of Spain.[48]

The good reputation of the Malta quarantine office spread widely along the Mediterranean littoral, so much so that when in 1831 the Sultan of Turkey requested the British Government to send him an expert on quarantine, the British Government did not hesitate to choose a Maltese. He was Mr. G. B. Schembri who, after a career of twenty-six years in the merchant navy, was appointed Captain of the Quarantine Port following the plague of 1813.[49] By the mid-century, however, a new current of opinion contrary to quarantine measures began to make itself felt in the Island. The most serious opposition came from the business community whose commercial interests suffered frequent interruptions owing to quarantine restrictions. In fact the losses due to quarantine in the Mediterranean in the first half of the nineteenth century were estimated to have amounted to two or three million pounds a year. Quarantine came also to be regarded as an irksome limitation of personal liberty. Between 1810 and 1832 an average of eight hundred to one thousand passengers were annually detained in quarantine while in 1837 alone more than two thousand four hundred individuals passed through the lazaretto.[50] Travellers criticised it as 'an expensive nuisance . . . without conferring benefit upon the country where it is practised except upon a few extortionate vendors of provisions and furniture'.[51]

---

[43] Angas, G. F., *A Ramble in Malta and Sicily in the Autumn of 1841*, London, 1842, pp. 15 and 30.

[44] Schembri, G. B., *Osservazioni pratiche intorno alla peste orientale*, Malta, 1847, pp. 28–29.

[45] MacGill, T., *A Handbook or Guide for Strangers Visiting Malta*, Malta, 1839, p. 87.

[46] Schembri, G. B., *Ragionamento pratico-sanitario*, Malta, 1842, p. 19.

[47] Minutes of the Board of Health from 14th March 1832 to 31st December 1856, Medical & Health Archives, Valletta.

[48] Government Notice of 18th October 1821.

Among medical men, too, voices were raised doubting the efficacy of quarantine; others concluded that it was a failure from the public health point of view and that its abolition was, therefore, desirable. This attitude originated from the fact that the true nature of the means of dissemination of plague was yet a mystery with the consequence that various conflicting opinions were entertained on the subject. Its incubation period, also, had not yet been determined with any certainty so that arbitrary periods of isolation were laid down for contacts. The division of merchandise into susceptible and non-susceptible cargo also raised doubts as to its usefulness. The idea was also gaining ground that the 'contagion' of plague ran in the blood of patients and contacts and that, therefore, it could be spread to the general population from persons isolated in the lazaretto by means of flies and mosquitoes. All these ideas tended to destroy confidence in the efficacy and protective function of quarantine.[52] The sanitary authorities of Malta, however, were far from being convinced of the uselessness of quarantine; indeed they continued to uphold the 'contagion' theory of plague and to observe the practices that had been followed since 1814 and which remained in force for many years afterwards.[53]

During the governorship of Sir Richard More O'Ferrall (1847–51) an attempt was made to modify the quarantine restrictions which in His Excellency's opinion had no effect in excluding disease from the Island but which had serious repercussions on the economy of Malta. The changes, however, which he succeeded in introducing were far short of what he had planned, for the prevalence of cholera in the east and the fears of the people not only deterred him from carrying out further modifications but compelled him on several occasions 'to sanction retrograde measures'.[54] The cholera epidemic of 1887 again furnished cause for criticism of the efficacy of quarantine in preventing the importation of disease into the country. This time it was none other than the Chief Government Medical Officer himself, Prof. S. L. Pisani, who questioned the advisability of retaining the traditional quarantine system. 'Restrictive measures', he stated, 'however strictly enforced can never ensure its being kept out of the Island.' He was prepared to rely more on good local sanitation than on quarantine measures. 'Do what we may in the way of preventing the seed being sown, we are sure to be baffled. But let the soil be sterilised, let the seed fall on barren rock and it will not germinate, whether the season be favourable or not. This appears to me as clear as daylight and it admits of no rejoinder.'[55] Quarantine was also being condemned because it was realised, towards the end of the century, that it engendered a false sense of security in that it tended to render efforts towards sanitary reform in the Island nugatory.[56]

---

[49] Schembri, G. B., *Ragionamento pratico-sanitario*, Malta, 1842, pp. 5, 12 and 13.

[50] Holroyd, A. T., *op. cit.*, pp. 38–41.

[51] Tallack, W., *Malta under the Phoenicians, Knights and English*, London, 1861, pp. 162–163.

[52] Davy, J., *op. cit.*, p. 323.

[53] Hennen, J., *Sketches of the Medical Topography of the Mediterranean*, London, 1830, p. 637.

On the 6th October 1906 the quarantine establishments were transferred to the Public Health Department. Every effort was then made to bring the quarantine rules in line with the procedures existing on the continent and in harmony with current principles of preventive medicine.[57] As a result, new regulations based on the Paris Convention of 1903 were adopted in August 1908. The most important innovation was the introduction of the 'surveillance' principle by which, in certain instances, passengers were granted pratique at once and were allowed to proceed to their residence without undergoing any quarantine at the lazaretto provided they remained under medical supervision for a certain period of time; however, passengers coming from ports or arriving on ships with smallpox, plague and cholera had still to undergo quarantine in accordance with the old regulations.[58]

The quarantining of passengers was resorted to as late as 1929 in the case of arrivals from Tunis when that country was infected with plague. This precautionary step was very unusual since, although Malta was not a signatory to the International Sanitary Convention of 1926, every effort was made by the Maltese Health authorities to follow the practices adopted by these conventions as far as local conditions allowed; in fact, nowadays, medical inspection of ships and surveillance of passengers are the routine procedures. Only infected ships are detained in quarantine.[59]

[54] *Reports Exhibiting the Past and Present State of Her Majesty's Colonial Possessions*, London, 1849, p. 290.

[55] Pisani, S. L., *Report on the Cholera Epidemic in the Year 1887*, Malta, 1888, p. 21.

[56] Maunsell, T., *Letter to the Chief Staff Officer*, Malta, 1897.

[57] *General Health Report for 1906–07*, Malta, p. xii.

[58] *Malta Government Gazette*, 28th August 1908, p. 842. *General Health Report for 1908–09*, Malta, p. vii.

[59] Galea, J., *op. cit.*, Royal Malta Library.

CHAPTER 32

The Lazaretto and Isolation Hospitals

ORIGINALLY the word 'lazaretto' denoted an institution for the exclusive care and segregation of lepers who were regarded as being objects of peculiar concern to St. Lazarus, but in the course of time it was applied to all places for the isolation of persons affected with infectious illnesses who, because of the fear of 'contagion', were secluded from the rest of the community.[1] As early as 1423 a lazaretto had been set up at Venice. With the development of the quarantine system these establishments became numerous in the Mediterranean basin.

In Malta the first lazaretto was erected at Rinella, a bay of the Grand Harbour. It was subsequently transferred to the foreshore beneath the Kordin heights in the same harbour and afterwards, during the time of Grandmaster Ramon Perellos y Roccafull (1697–1720), to a large hall on that part of the Valletta wharf known as '*il barrira*'.[2] This word is derived from the Italian '*barriera*' meaning a barrier, the allusion being to the railing which prevented persons undergoing quarantine from coming in contact with outsiders. Over the portal of the hall was the inscription '*Haec fecit populorum amor*'. A chapel dedicated to Our Saviour was attached to this building. Mass was celebrated here for the benefit of sailors kept in quarantine on board their own ships anchored beneath St. Barbara bastion.[3]

One of the earliest references to the lazaretto that has been recorded by travellers is to be found in the diary of an Englishman. George Sandys started on a sea voyage from Venice to the East in 1610 and passed through Malta on his way back to England. He tells us next to nothing about the appearance of the lazaretto but has written a delightful account of an adventure which he had while being detained in quarantine. Sandys was conveyed to the lazaretto by the boat of the port sanitary authorities and informed that he was to remain there for thirty or forty days before he could be allowed admission into the city; but as things turned out he was not destined to stay there for so long. Here is the story in his own words: 'Behold an accident which I rather thought at first to have been a Vision than (as I found it) real. My Guardian being departed to fetch me some Victuals, laid along, and musing on my present Condition, a Phalucco (i.e. a small boat) arrived at the place. Out of which there stept two old women; the one made me doubt whether she were so or no, she drew her face into so many forms and with such antick gestures, stared upon me. These two did spread a Turkie Carpet on the Rock and on that a table-cloth which they furnished with a variety of the choicest Viands. Another arrived, which set a Gallant ashore with his two Amorosaes, attired like Nymphs with Lutes in their hands full of disport and sorcery.' Sandys was invited to join the company and to share their repast which he did. He found that the gallant was a French captain who offered to smuggle Sandys into the city during the night and to take him back to the lazaretto the following morning. Sandys was not, however, prepared to take this risk as such a breach of the quarantine rules was punishable by death. The captain must have been a very influential person for he promised Sandys that he would free him from the lazaretto in a very short time. In fact the next morning, 'soliciting the Great Master on my behalf, as he sate in Council who with the assent of the Great Crosses granted me Pratick'.[4]

---

[1] *Report on Leprosy by the Royal College of Physicians*, London, 1867, p. 73.

[2] Mifsud, A., *Knights Hospitallers of the Venerable Tongue of England in Malta*, Malta, 1914, p. 301.

[3] Abela, G. F., and Ciantar, G. A., *Malta illustrata*, Malta, 1780, pp. 15–16.

It must not be imagined from this singular experience that every traveller coming to Malta was as fortunate as Sandys and that the Grandmaster was always so easily prevailed upon to cut short the period of quarantine; in fact in face of constant threats from plague the government of the Order came to pin its faith more and more on the isolation of travellers entering the Island and on the strict observation of the quarantine regulations.

During the plague epidemic of 1592–93 a temporary lazaretto was set up on what was then called Bishop's Islet in Marsamxett Harbour by Grandmaster Hugues Loubenx de Verdala. When, in 1726, Grandmaster Antonio Manoel de Vilhena erected a fort near the lazaretto the islet became known as Manoel Island, a name that it has retained to this day. A permanent lazaretto was built on this island in 1643 during the rule of Grandmaster Jean Paul Lascaris.[5] Persons of high rank were, however, accommodated elsewhere while undergoing quarantine; thus when His Britannic Majesty's Ambassador to Turkey came to Malta in April 1669 he was lodged in the Villa of Sarria at Floriana.[6] In 1686 another British ambassador to Constantinople was also kept in the same residence where he died during his first few days of quarantine.[7]

It seems that the lazaretto at Valletta was kept in use for quite a long time after the erection of the new building on Manoel Island; indeed it is mentioned in the diary of the Rev. Henry Teonge who was the chaplain on board H.M.S. *Assistance* when she visited Malta together with other vessels belonging to Sir John Narborough's naval squadron in 1675. He thus refers to it: 'The Lazaretta (a place on purpose for such as are sick of the plague or other pestilentiall diseases; which in regard to the heate of that country doth often rage there) lyes closse under their outermost wall and is extremly neatly kept and provided for.'[8] As late as 1779–88 allusion is made in the Treasury accounts of the government to 'the expense of the considerable repairs made at the quarantine at the Grand port'.[9]

---

[4] Sandys, G., *Sandys Travels*, London, 1673, p. 178.

[5] Archives 114, fol. 113t. Manuscript 1146, vol. i, fol. 467, Royal Malta Library. Dal Pozzo, B., *Historia della Sacra Religione Militare di S. Giovanni*, Venezia, 1715, p. 76.

[6] Ricci, I., *Saluti e trattamenti dell'Ordine*, fol. 17. In the possession of the author.

[7] Dal Pozzo, B., *op. cit.*, p. 629.

Following the great plague epidemic of 1675–76 the Marsamxett lazaretto was improved by Grandmaster Nicholas Cottoner[10] and afterwards by Grandmaster Gregorio Caraffa and Grandmaster Antonio Manoel de Vilhena. Warehouses were built for the storage of merchandise subject to the quarantine laws of the period.[11] When seen by John Howard, who started on a tour of the lazarettos of Europe in 1785, it consisted of sixteen rooms on two floors, the eight apartments on the first floor opening on to a balcony. There were also three courts, two for passengers and merchandise, and another one for cattle imported from the Barbary coast; a burial ground and a place for the burning of bodies of patients dying of the plague.[12]

The duties of the Health Guards and 'perfumer' ('*profumatore*') were considered to be of such paramount importance that their performance was regulated by the legal code of the time. In the words of the Code de Rohan, on the Malta lazaretto depended, not only the safety of the public health of the Island but 'of all Italy and of various other Christian states'. The guards and the 'perfumer' were selected by the Grandmaster on the advice of the sanitary authorities and on being appointed they were made to declare on oath that they would perform their duties with 'exactitude, diligence and fidelity'. They were responsible for the 'perfuming' of passengers at the beginning of quarantine and then two days before the expiry of this period; for the depuration of trunks, cases and goods and also for the searching of ships to see whether any articles of a 'susceptible' kind had been hidden. The employees guarding merchandise in the warehouses of the quarantine station were debarred from communicating with one another on penalty of being sent as oarsmen on board the galleys for ten years. Negligence in depuration was punished by condemnation to the galleys for three years. The escape of passengers from the lazaretto or the removal of any goods therefrom before the end of quarantine involved the Health Guard in the infliction of corporal punishment and even of the death penalty according to the gravity of the offence. Capital punishment was also meted out to anyone caught approaching or trafficking with ships in quarantine or found within that part of the harbour extending 'from

---

[8] Teonge, H., *The Diary of Henry Teonge*, London, 1825, p. 48.

[9] De Boisgelin, L., *Ancient and Modern Malta*, London, 1805, vol. i, p. 315.

[10] Laferla, A. V., *The Story of Man in Malta*, vol. i, Malta, 1939, p. 103.

[11] De Boisgelin, L., *op. cit.*, p. 301.

[12] Howard, J., *An Account of the Principal Lazarettos in Europe*, London, 1789, p. 8.

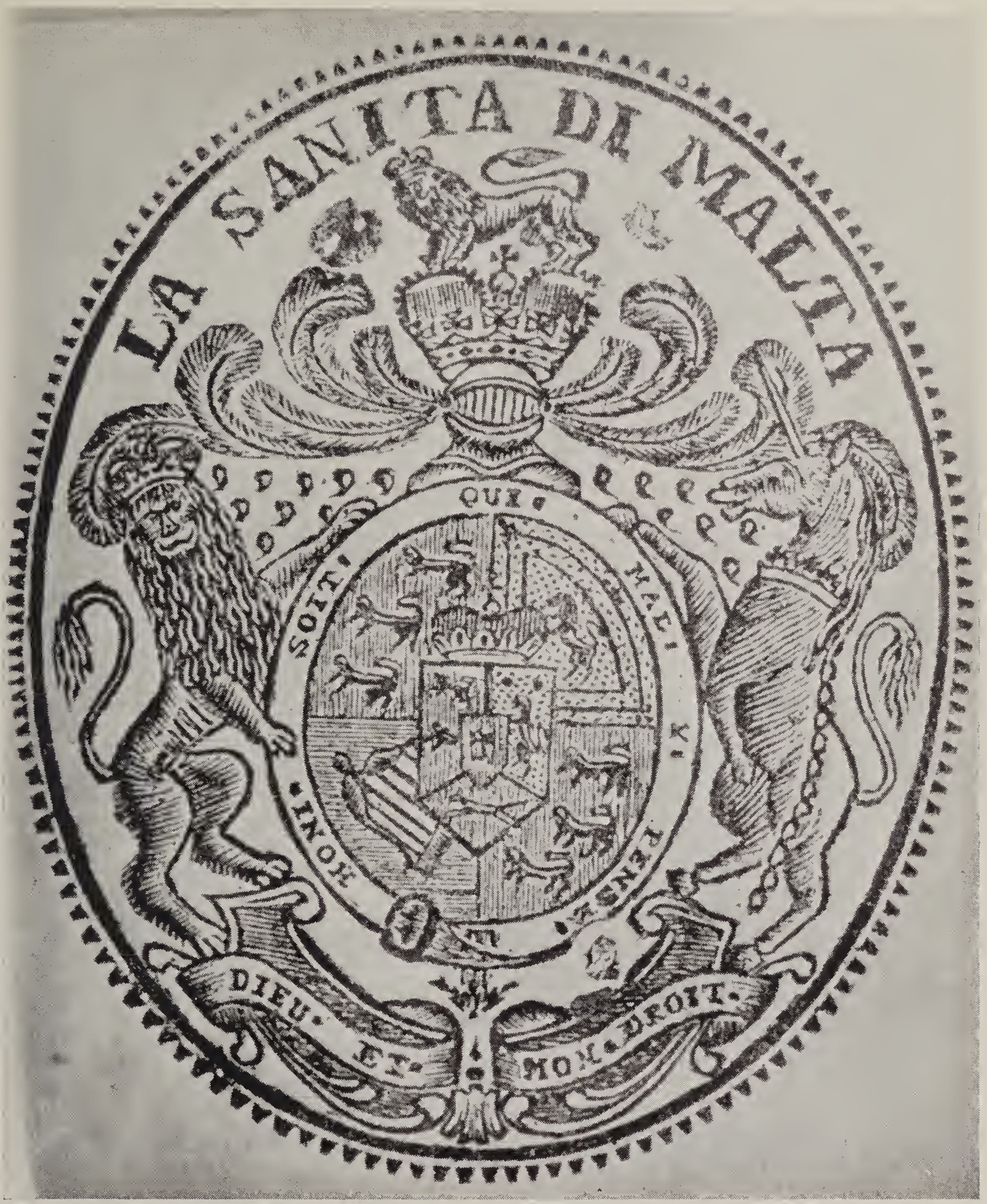


Plate XIII

Letter head of the Quarantine Office of Malta in 1829. The Royal Arms show the shield of Hanover placed in the centre.

By courtesy of the Director of the National Museum, Valletta

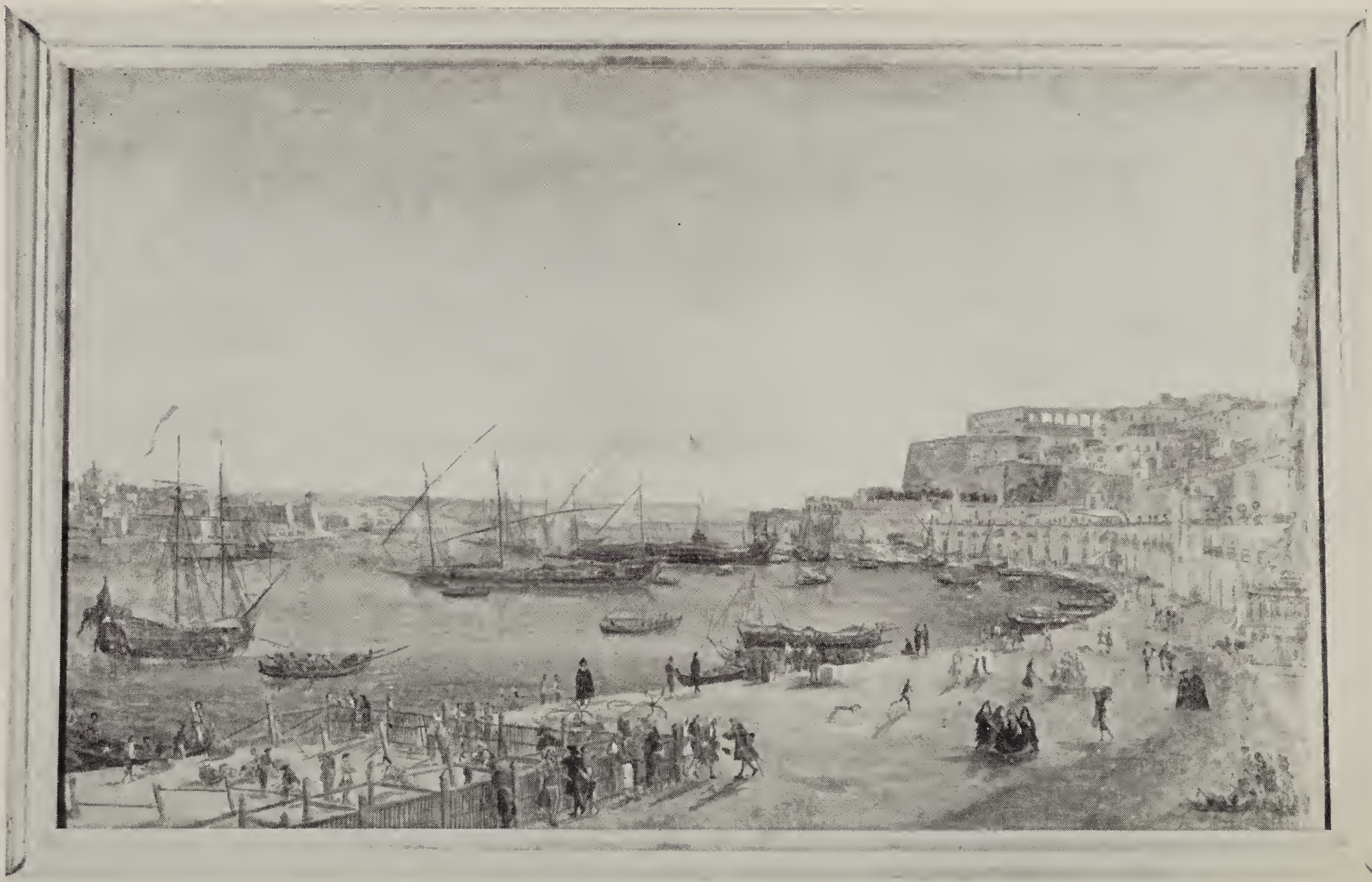


Plate XIV

An 18th century view of the wharf at Valletta. In the left-hand corner there is the 'barriera'—a system of railings meant to prevent contact between people in quarantine and the inhabitants.

By courtesy of the Director of the National Museum, Valletta

the point of the arcades to the sentry post of the cannon of Fort Manoel'.[13] Severe penalties were likewise contemplated against those who aided escapees from the lazaretto. Thus when in June 1700 eight 'infected' detainees managed to escape from the establishment a decree was issued to warn the people not to have any dealings with these men or help them in any way under penalty of three years' rowing in the galleys if the transgressor was a man or six years' exile from the Maltese Islands if the culprit was a woman. The same punishments were laid down for persons who knew the whereabouts of the escapees and failed to notify the court authorities.[14]

During the brief French occupation of the Island (1798–1800) Napoleon appointed a commission made up of the General Commanding the Garrison, the Government Commissary and the Commissioner of Marine to find a locality in the Island suitable for the erection of a lazaretto for the reception of his troops. It was to be provided with extensive grounds containing several country-houses, barracks for five hundred to six hundred soldiers and quarters for the accommodation of a general and several officers of high rank.[15] The French domination, however, was far too short and stormy to allow them to execute this plan. Napoleon left Malta a few days after taking possession of it but in September 1798 a report reached the French garrison that Napoleon meant to return to the Island. In the expectation of his arrival a large barrack and some lodgings are said to have been prepared for him at the lazaretto in case it was found necessary to put him in quarantine on coming ashore. Napoleon never returned to Malta but the need for an adequate lazaretto continued to occupy the attention of the French though the turbulent state of the country never gave them a chance to carry out any of their intentions.[16]

Increased travelling facilities since the early decades of the nineteenth century were responsible for the periodical extensions of the lazaretto. In 1821 it consisted of a number of buildings with an extensive front facing the water and was surrounded by a triple line of high walls towards the land. A very extensive area enclosed by walls and capable of accommodating many hundreds of persons was reserved for the reception of contacts in the event of the appearance of pestilence. These arrangements dated from the governorship of Sir Thomas Maitland who was in Malta towards the end of the plague of 1813.[17] It was again enlarged in 1837–38 during the governorship of Sir Henry Frederick Bouverie.[18] A restaurant was also added at this period (1836) to obviate the inconvenience suffered by persons in quarantine who previously had to have their meals brought from Valletta.

---

[13] *Del Dritto Municipale di Malta*, Malta, 1784, pp. 278–282. *Leggi e costituzioni prammaticali*, Malta, 1724, pp. 81–84.

[14] Manuscript 149, fol. 88, Royal Malta Library.

[15] Scicluna, H. P., 'Acts and Documents Relating to the French Occupation of Malta in 1798–1800', *Archivum Melitense*, n.d., v. 93.

[16] Hardman, W., *A History of Malta*, London, 1909, pp. 112 and 128.

[17] Hennen, J., *Sketches of the Medical Topography of the Mediterranean*, London, 1830, p. 489.

[18] Micallef, R., *Origin and Progress of the Charitable Institutions*, Malta, 1901, p. 23.

The commissioners who visited the Island to report on its sanitary condition in 1863 found the lazaretto to be in a better state than similar establishments in the Mediterranean area but they felt that it had been 'planned more under the influence of fear than of an enlightened consideration of health'.[19] In 1873 the Maltese medical journal *Il Barth* urged upon the government the removal of the lazaretto to a deserted place in the Island away from inhabited areas. This suggestion was motivated by the belief, then widely held by medical men, that if a person undergoing quarantine fell ill with an 'epidemical contagious disease' the 'pestiferous poison' to which the illness gave rise attached itself to the dust in the air and in this way it could propagate the illness to the neighbouring towns of Valletta and Floriana and even to the villages—as they were then—of Pietà, Msida, Sliema and St. Julian.[20] This suggestion was never acted upon and the lazaretto remains to this day on its original site.

Passengers arriving in Malta in the days when plague and cholera were prevalent in Europe and the Levant were liable to a quarantine of varying periods. Up to the last quarter of the nineteenth century, a passenger coming ashore from a vessel with a foul or suspected bill of health was assigned an apartment at the lazaretto. Here his liberty was much restricted. He was not permitted to enter other apartments than his own or to receive visitors except at the so-called '*parlatorio*' or speaking-place. He was obliged to open his baggage and air his clothes and other belongings during his period of detention. His letters were fumigated before they were sent to their destination. To ensure that the passenger obeyed these regulations Health Guardians were employed to see that none of these instructions was disregarded but it was the passenger himself who had to pay the guardians' wages and to provide them with food.[21] The '*parlatorio*', set up in 1814, occupied the ground floor of the Health Office which at that time was situated just outside Marsamxett Gate. Here the captains of vessels in quarantine came to transact business with the townspeople. They were not, however, allowed to come in contact with their customers and for this purpose two partitions were provided to prevent them from touching one another.[22]

Many distinguished visitors to Malta in the nineteenth century passed through the lazaretto before they were permitted to tour the Island. It is interesting, and sometimes amusing, to read the accounts of their reactions aroused by confinement in the quarantine station. The Rev. S. S. Wilson of the Church Missionary Society, who spent many years in Malta from

---

[19] Sutherland, J., and Galton, D., *Report of the Barrack and Hospital Improvement Commission on the Sanitary Conditions and Improvement of the Mediterranean Stations*, London, 1863, p. 170.

[20] *Il Barth*, 22nd July 1873, p. 295.

[21] *Malta Almanack and Directory for the Year of Our Lord 1845* (Muir), Malta, p. 59.

[22] Badger, G. P., *Historical Guide to Malta and Gozo*, Malta, 1879, p. 194.

1819 onwards, found the 'celebrated lazaretto a most commodious though expensive residence'. He had been twice pent up there and though annoyances were inevitable he did not hesitate to state that 'its internal management, on the whole, reflects high honour on the local authorities'.[23] Lord Byron paid three visits to Malta—in 1808, 1811 and 1823. His second stay here called forth a bitter 'Adieu to Malta' in which he vented his chagrin for everything Maltese, not excluding the lazaretto:

> Adieu, thou damn'dest quarantine,
> That gave me fever and the spleen.

When Sir Walter Scott reached Malta in November 1831 a quarantine was in force on all passengers arriving from England where cholera was then raging. Scott's quarantine was fixed at nine days and he was allowed to undergo it, together with his family, in the nearby Fort Manoel instead of at the lazaretto. He was also permitted to have visitors but he was obliged to remain behind a stout bar which kept him at the prescribed distance from them.[24]

The Rev. (later Cardinal) J. H. Newman has left us his impressions of the lazaretto. His first call at Malta was on the 24th December 1832. He only stayed for a few days while his ship took in coal. The passengers did not go ashore and as soon as the vessel was moored opposite to the lazaretto they were put under the care of a guardian who, wrote Newman, 'watches over our quarantine both to keep us from others and others from us. A queer set of fellows they are, with yellow collars . . .' The activity at the '*parlatorio*' struck him. 'The strange dresses, the strange languages, the jabbering and grimaces, the queer faces driving a bargain across the barrier, without a common language, the solemn absurd guardians with their staves in the space between, the opposite speaker fearing nothing so much as touching you, and crying out and receding at the same time, made it as curious a sight as the free communication of breath and the gratuitous and inconsistent rules of this intercourse made it ridiculous. But the British Government is forced to be strict in its rules by the jealousy of other powers. By being so Malta becomes a gate for the whole Continent.' In another letter home he states: 'This morning we saw a poor fellow in the lazaret close to us, cut off from the ordinances of his church, saying his prayers with his face to the house of God in his sight over the water.' Newman is here referring to the small chapel dedicated to St. Roque which was built in 1643 on St. Michael's bastion at Valletta across Marsamxett Harbour and facing the lazaretto for the celebration of mass for persons undergoing quarantine.[25] The chapel was destroyed by air bombardment during the Second World War.

[23] Wilson, S. S., *Sixteen Years in Malta and Greece*, London, n.d., p. 25.

[24] Lockhart, J. G., *Memoirs of the Life of Sir Walter Scott*, London, n.d., vol. ii, p. 333.

[25] Ferres, A., *Descrizzione storica della chiese di Malta e Gozo*, Malta, 1866, p. 246. Letters to Government from 3rd January 1862 to 10th March 1865, fol. 392, Medical & Health Archives, Valletta. (The practice of saying mass in this chapel continued up to 1864.)

Newman returned to Malta on the 10th January 1833 and on the 15th he wrote a letter in which he described his apartment in some detail: 'I am writing in a large room twenty feet high, without furniture, opening into others far larger, and all the windows, which are casements, entirely open—that is, in fact, I am sitting in the open air. The floors are stone. We use a fireplace at breakfast and dinner for boiling eggs and heating our milk . . . I have hired a violin and, bad as it is, it sounds grand in such spacious halls.' He also composed a few short poems while in his imprisonment, as he called it, and studied Italian. A staircase led from his room to a terrace over the sea. 'On this common ground all persons in quarantine may show themselves; they may sit on the same seat successively but they must not touch. One soon gets accustomed to this; nobody touches nobody. I have only to add that my dressing room window opens upon the chimney of the baking-room for letters; and the sharp, sour smell often reminds me of Frank's letters (his brother) which have been baked and doctored there.'

It appears that the lazaretto was haunted in Newman's time for on a few nights he had 'mysterious night visitants' and was awakened by strange noises. One night he sat up in his bed ready to spring out and having waited for a considerable time he caught a very bad cold for which he was treated by Dr. John Davy (the brother of Prof. Humphry Davy) with antimonial wine which Newman found to be 'wonderfully efficacious'.[26] Poltergeist phenomena were alleged to have occurred some years earlier when a Health Guardian and his family were visited by evil spirits which destroyed the bedding, clothes and 'every article he possessed'. The guardian's story created such a sensation that it 'infected all the other guardians with an apprehension of spirits'. The Superintendent of Quarantine, however, reported to the Chief Secretary to Government that the whole affair was an imposture practised by the guardian; but the latter persisted in his story and went so far as to have a drawing made of the visitation of the spirits which he exhibited in the streets for the purpose of collecting money for masses to be said for the repose of the troubled spirits. This gesture, however, far from winning over the Superintendent of Quarantine to the belief in evil spirits exasperated him to such an extent that he insisted on the man's removal from the lazaretto.[27]

The traveller George Waring spent some time in the lazaretto in December 1833. He wrote: 'The apartment allotted to my companion and myself is an immense dismal place, forty-three feet long, twenty-six broad, and about twenty high with the roof supported upon arches . . . We are allowed to row about the harbour and to land in one or two places with the permission of the guardian who always accompanies us to prevent our having any communication with the people on the shore or with other boats . . . Our servant crosses over to the town twice a day for our needs . . . When we want any particular article from the inn we write our commissions on a slate which is not considered capable of conveying infection and is suffered to pass without undergoing any purification . . . In wet weather we are not without the means of taking exercise for we have bought some tennis-balls . . . A large unoccupied room makes an excellent tennis-court for us . . . The softness of the stone of which the walls of our prison are built has induced many of its inmates to carve their names which are generally accompanied by the date and duration of their imprisonment. On the day before our enlargement we received a visit from the medical man appointed to ascertain the state of health of those whose quarantine is about to expire. He asked one question only "Gentlemen, are you in good health?" which being answered in the affirmative he made a low bow and took his leave.'[28] Mrs. Sarah Austin, who accompanied her husband Sir John Austin as Royal Commissioner to Malta in 1836, enjoyed the peacefulness of her 'comfortable prison' which, she found, afforded great relief to the weary traveller.[29]

---

[26] Mozley, A., *Letters and Correspondence of John Henry Newman*, vol. i, London, 1891, pp. 311, 331, 332.

[27] Darmanin Demajo Manuscripts. In the possession of Dr. J. Darmanin Demajo.

When accommodation was not available at the lazaretto, Fort Ricasoli, at the entrance of the Grand Harbour, was adapted as a temporary lazaretto under the supervision of the Superintendent of Quarantine.[30] Fort Manoel was also used for this purpose when thanks to the advent of the steamship the influx of passengers became so great that the lazaretto proved unequal to their depuration.[31] It was in this Fort that the English novelist, W. M. Thackeray, spent seventeen days quarantine when he came to Malta in November 1844. In his characteristic satirical strain he thus depicts the Fort 'where government accommodates you with quarters; where the authorities are so attentive as to scent your letters with aromatic vinegar before you receive them and so careful of your health as to lock you up in your room every night lest you should walk in your sleep, and so over the battlements into the sea; if you escaped drowning in the sea, the sentries on the opposite shore would fire at you, hence the nature of the precaution'. His experience of quarantine made such a deep impression on him that, although he afterwards found the society of Valletta most hospitable and agreeable, he somehow 'did not feel safe in the island with perpetual glimpses of Fort Manoel from the opposite shore'. He was always haunted by the fear that the quarantine authorities would fetch him back again 'on a pretext of posthumous plague'. Thackeray's stay at the Fort was rendered unusually gloomy by the death of a fellow-traveller. 'Such an occurrence as a death in a lazaretto', he reflects, 'mere selfishness renders striking . . . He is dead in a day and buried in the walls of the prison. A doctor felt his pulse by deputy—a clergyman comes from the town to read the last service over him—and the friends who attend his funeral are marshalled by lazaretto guardians so as not to touch each other. Every man goes back to his room and applies the lesson to himself.'[32] For the administration of Holy Communion and Extreme Unction to moribund patients suffering from plague, special silver appliances were in use by which the priest could administer the sacraments while keeping at a safe distance from the sick.[33]

---

[28] Waring, G., *Letters from Malta and Sicily*, London, 1843, pp. 53–72.

[29] Ross, J., *Memoirs and Correspondence of Mrs. John Taylor, Mrs. Sarah Austin and Lady Duff Gordon*, London, 1888, vol. i, p. 103.

[30] Government Notice of 3rd November 1827.

[31] MacGill, T., *A Handbook or Guide for Strangers Visiting Malta*, Malta, 1839, p. 86.

Apart from three cemeteries and a room reserved for the burning of corpses there was another more gruesome object at the lazaretto. This was a stone gibbet erected on a rise of ground between the lazaretto and the fort. It was purposely placed in a prominent position so that it could be seen by the crews of ships entering Marsamxett Harbour. Capital punishment for the infringement of the quarantine laws was retained by the British authorities and this scaffold was built in March 1814 for carrying out the death sentence on Felice Camilleri, one of the guardians of the lazaretto, who had stolen some goods that were in quarantine at the establishment. However, as Felice Camilleri was the first individual to be sentenced to death since His Royal Highness the Prince Regent assumed the sovereignty of these Islands, he was reprieved by the Governor in the name and on behalf of the Regent.[34] The scaffold was destroyed in 1839 by the Superintendent of the Ports who considered it as an outdated means of deterrence and who succeeded in persuading the government that it was blown away during a stormy night by a strong 'gregale' wind.[35]

Although a sojourn at the lazaretto was far from being a pleasant experience, it was not altogether a monotonous affair for those endowed with a sense of humour and a flair for studying human nature. Indeed while thus caged, the traveller had an opportunity of meeting men from all walks of life and of sizing up the character of each individual. 'There', wrote an observant visitor, 'you may look at him, inspect him, talk to him at your leisure; if a diplomate, you may draw him; if a savant, you may stuff him; safe with six feet and a yellow visaged guardian between you. You thus ascertain the temper of the lion before he is loosed.'[36] With the rapid development of steam navigation sea journeys became so commonplace that they lost their adventurous character and visitors to Malta no longer cared to record their travelling experiences. A stay at the lazaretto came to be regarded as an unavoidable inconvenience to be borne with resignation. Apart from this, the growth of bacteriology with its consequent explosion of the old theories of 'contagion' gradually brought about a new orientation in the conception of the transmission of disease with the result that periods of quarantine were shortened. In this manner the lazaretto lost much of its dread. Its sanitary importance declined still further when surveillance was introduced in substitution for quarantine at the beginning of the present century. As, however, quarantine was not done away with completely, the accommodation at the lazaretto was improved and rendered quite comfortable. A disinfecting station was added with specially planned bathrooms besides suites of rooms of modern construction for the quarantining of persons or as temporary hospitals. Large stores for merchandise, dog-kennels and cattle sheds also form part of the establishment.[37]

---

[32] Thackeray, W. M., *Burlesques*, London, 1903, p. 269.

[33] *Annual Report of the Museum Department for 1949–50*, Malta, 1951, p. vi.

[34] *Malta Government Gazette*, 30th March 1814, p. 90.

[35] Inglott, F. V., Manuscript note attached to the inside of the back cover of Bussolin, G., *Delle istituzioni di sanità marittima nel bacino del Mediterraneo*, Trieste, 1881; copy at Royal Malta Library.

[36] Slade, A., *Turkey, Greece and Malta*, London, 1837, vol. i, p. 130.

ISOLATION HOSPITALS—MALTA

When the lazaretto was enlarged in 1837–38 the opportunity was taken of erecting a building near its western end for use as a Plague Hospital.[38] As the danger of plague became remote with the passage of time the hospital was converted into married quarters for troops. In 1865, however, it was reopened for passengers coming from abroad who developed some infectious illness during the voyage or on arrival.[39] During the smallpox epidemic of 1871 it was put into service under the direction of the Chief Police Physician.[40] It appears that thereafter the hospital was not kept in continuous use but was only resorted to on the occasion of some epidemic outbreak. It was functioning in 1878 for smallpox patients and again in 1879 for the reception of 'fever cases'. At this period it had a complement of forty beds and was staffed by two male and two female nurses, a Resident Physician and an Apothecary. The practice of allowing relatives to stay and live with the patients in the hospital had been tried out but it was suspended at this period as it disrupted the discipline of the institution and interfered with patients' treatment. An exception, however, was made in the case of sick children of tender age who required the assistance of their mothers and also in the case of sick mothers who had no one with whom to leave their children at home.[41] In 1884 the hospital was adapted for the treatment of infectious diseases both among the inhabitants and among passengers and crews of ships entering Maltese ports.[42] Unfortunately its vicinity to the lazaretto caused the mass of the people to regard it with the same dread and dislike that public prejudice traditionally associated with the lazaretto. To overcome this fear the Chief Government Medical Officer suggested, in his report on the diphtheria epidemic of

---

[37] Galea, J., Disinfection of Mail at Lazaretto, Typescript, Malta, 1946, Royal Malta Library.

[38] Micallef, R., *op. cit.*, p. 23.

[39] Ghio, A., *The Cholera in Malta and Gozo in the Year 1865*, Malta, 1867, p. 22.

[40] Register of References to the Comptroller of Charitable Institutions, no. 12, fol. 28, Medical & Health Archives, Valletta.

[41] Letters to Government from 1st July 1878 to 22nd March 1883, fol. 138, Medical & Health Archives, Valletta.

[42] Micallef, R., *op. cit.*, p. 22.

1907, the construction of a new Isolation Hospital in more attractive surroundings;[43] but the hospital was only transferred to other premises in 1940 at the outbreak of war with Italy. Even so the change was of a temporary nature. The Manoel Hospital was abandoned because being in close proximity to naval establishments it formed a vulnerable target to attacking air forces.[44] It was eventually taken over by the naval authorities and suffered heavy damage from aerial bombardment. During the outbreak of smallpox in June–August 1946, the 39th General Hospital at Mellieha was lent by the army to the civilian government for the segregation of smallpox cases in the absence of an appropriate isolation hospital.[45] The Manoel Hospital was eventually returned to the Medical and Health Department in November 1948 and was once more reopened for infectious cases in October of the following year.[46]

ISOLATION HOSPITAL—GOZO

The Gozo Isolation Hospital was opened on the 21st October 1897 in a house belonging to the government on the road from Mġarr to Rabat (Victoria). Before this building was adapted and remodelled as a hospital, cases of infectious disease had been received and treated in premises hired by the government but they were quite unsuitable for the purpose.[47]

ISOLATION HOSPITAL—KEMMUNA

This hospital was opened some time before 1912 for the treatment of passengers suffering from plague or cholera as it was considered dangerous to the public health to house these cases at the Manoel Hospital in the vicinity of inhabited places. It was feared, too, that as the Manoel Hospital was not far from the lazaretto there was a risk of infecting healthy passengers undergoing quarantine. There were other important reasons for keeping cholera and plague patients away from Malta for if these cases were to be landed at the Manoel Hospital, Malta's bill of health would be a foul one. By having the patients treated on the island of Kemmuna this difficulty was overcome for their presence on that small island did not count against Malta as the two islands are separated by a good stretch of sea.[48]

---

[43] 'General Health Report for 1906–07', *Malta Government Gazette Supplement*, 20th September 1907, p. v.

[44] *Report of the Director of Public Works for 1945–46*, p. xv.

[45] *Report on the Health Conditions of the Maltese Islands for the Year 1946*, p. xi.

[46] *Malta Government Gazette*, 4th February 1954, p. 152. *Report on the Health Conditions of the Maltese Islands for 1949*, p. lxxviii.

[47] Micallef, R., *op. cit.*, p. 24. Galea, M. A., *Il carità f' Malta u Ghaudex*, Malta, 1912, p. 31.

[48] *Royal Commission of 1912, Minutes of Evidence*, London, p. 166.

CHAPTER 33

Street Hygiene

THE streets and the roads grew up haphazardly from mere footpaths marked out by constant use. These paths ran from one village to another or meandered among fields and farms or wound without any plan between rows of houses in the towns. They were surfaced with chips of stones pressed into the soft subsoil. This soft material soon wore off rendering the roads and streets very dusty in the dry season and waterlogged and impassable in winter. These conditions were more or less universal in Europe during the Middle Ages and for several centuries afterwards. What the roads in Malta did not share with continental thoroughfares was the latter's infestation with highwaymen.

Official interest in street hygiene in Malta dates from the sixteenth century. A proclamation of the 17th November 1586 prohibited the throwing of refuse in the streets of Valletta, Senglea and Birgu under penalty of a fine.[1] Almost two hundred years later the code of laws of Grandmaster Antonio Manoel de Vilhena of 1724 prohibited shopkeepers, butchers and residents from throwing dirty water, litter and other waste material in the streets and squares of Valletta. Pigs, however, were allowed to roam at liberty in the streets of Valletta and the villages,[2] although at times their owners were compelled by law to tie the animals to their doors on account of the damage which they caused to the street surface under penalty of confiscation of the animal.

An index of the sanitary state of the streets that prevailed in the eighteenth century is afforded by two decrees of 1725 and 1739 which condemned all those fouling the walls of the Grandmaster's Palace and of the Conventual Church of St. John at Valletta to a fine or to six months unpaid labour in Fort Manoel.[3] Another decree of the 29th November 1766 deplored the 'great irreverence' of those who did not shrink from urinating along the walls of the church of St. John.[4] These habits were so ingrained in the people that neither the might of the law nor the passage of three-quarters of a century would eradicate them and as late as the

---

[1] Manuscript 1069, no pagination, Royal Malta Library.

[2] Dessoulavy, C. L., 'Visitors to Malta from the 15th to the 18th Century', *The Sundial*, 1940, iii. 105.

[3] Manuscript 429, Bandi 1722–36, fols. 94, 117 and 233; Bandi 1736–44, fol. 81, Royal Malta Library.

[4] Manuscript 429, Bandi 1765–72, fol. 58, Royal Malta Library.

15th January 1794 another decree was published expressly prohibiting people from soiling the square and environs of the Conventual Church and of the Grandmaster's Palace.[5] In spite of these low hygienic standards, Malta did not compare unfavourably with other continental countries at the time. In fact, a French visitor, who was a member of the Royal Academy of Painting and Sculpture of France, wrote at this period that the 'cleanliness of Malta, contrasted with what is seen in Sicily, is so striking as to make us imagine ourselves two thousand leagues from it'.[6] The English traveller, Sir Richard Colt Hoare, who visited Malta in 1790, remarked that Valletta could vie with Holland in regard to neatness. 'The whiteness of the stone buildings and the little use made of horses and carriages in the street contribute to preserve the appearance of cleanliness without, while the taste and manners of the people are equally favourable to that habit within.'[7]

Until 1771 the streets of Valletta were badly paved and encumbered with steps in front of the houses. In later years the streets were repaved and cleared of steps and subterranean channels were dug to carry off storm water.[8] Vilhena's laws regarding street hygiene were confirmed by the code of Grandmaster de Rohan of 1784.[9] In October of the following year these laws, which were originally enforced only in the city of Valletta, were made applicable to the other towns of the Island, i.e. Floriana, Birgu, Senglea and Bormla.[10] In Gozo the inhabitants of the citadel and its suburbs were obliged to sweep the space in front of the doors of their houses and shops at least every feast-day and to carry away the refuse.[11] An idea of the conditions prevailing in the streets during the last years of the Order's domination in Malta can be gained from the following 'Regulations concerning the streets' issued by the government on the 11th August 1796: (a) No one is allowed to light fires in the streets without first preparing a bed of non-inflammable material to protect the surface of the pavement; (b) it is not permitted to drive holes in the streets unless an application has been approved by the Venerable Congregation of War; (c) collectors of street refuse are not allowed to make use of iron tools such as hoes or similar implements; (d) no one is to throw dirty water and other filthy material in the streets; (e) anyone who damages the street surface must make good the damage; (f) shopkeepers, fruit and vegetable sellers and artisans are prohibited from obstructing the streets with benches, baskets and crates; (g) cart drivers are not to litter the streets with any material they may be transporting; (h) carts and calesses are not to be driven over curbs and stairs; (i) drivers are not allowed to park their vehicles in the main thoroughfares but are to leave them in the less frequented streets.[12]

---

[5] Manuscript 429, Bandi 1784–94, fol. 267t, Royal Malta Library.

[6] De Non, M., *Travels in Sicily and Malta*, London, 1789, p. 260.

[7] Hoare, R. C., *A Classical Tour through Italy and Sicily*, London, 1819, vol. ii, p. 289.

[8] De Boisgelin, L., *Ancient and Modern Malta*, London, 1805, vol. i, p. 30.

[9] *Dritto Municipale di Malta*, Malta, 1784, p. 316.

[10] *Collezione di bandi*, Malta, 1840, p. 6.

[11] *Dritto Municipale . . .*, p. 340.

The earliest legislative enactment concerning street cleanliness under British rule was issued in March 1800 by Sir Alexander Ball when he was still styled 'Chief of the Maltese'. The injunctions in force during the Order's domination were upheld and confirmed. New regulations were published in September of the same year to do away with certain objectionable usages. The practice of slaughtering all sorts of animals, including cows, in the public market-square and other thoroughfares of Valletta was widespread, while the custom of storing manure in town houses was also very common. The nuisance value of these practices and their potential dangers to public health induced Sir Alexander Ball to remedy these abuses. He, therefore, issued a proclamation on the 18th September 1800 prohibiting the slaughtering of animals except in the abattoir set up at Marsamxett under penalty of the confiscation of the animal. He also ordered the removal of all manure from the houses of Valletta, Floriana and the other three cities and its deposit, within four days, in the open country.[13] These regulations were not, however, attended with the desired results. Hogs still roamed at leisure in the streets where they picked up the garbage thrown out by the residents. It has been stated that they were seldom molested or stolen[14] and that they were as numerous as dogs.

In 1801 a government notification of the 29th August renewed the prohibitions contained in previous proclamations and added some new ones. Town residents were not allowed to let their animals roam about in the streets and drink from public fountains except from specified ones that were reserved exclusively for animals. Things, however, did not improve. Manure was still kept in cellars and stables though its amount had been limited officially to one cart-load. Pigs, goats, rabbits and poultry still enjoyed the freedom of the streets of Valletta and other towns in 1807.[15] Apart from the filth and damage to which they gave rise, these animals were also a constant source of danger to the life and limb of children and old people passing through the streets. Government was well aware of these inconveniences and to obviate them a pen was constructed near Marsamxett Gate and the pig owners of Valletta were ordered to remove their animals thereto. To make sure that this order was obeyed it was ordained that all the pigs that were still at large in the streets eight days after the publication of the order were to be confiscated or handed over to the person who managed to capture them.[16] This measure led to the disappearance of the pig from the streets of Valletta but visitors were still complaining in 1812 of the filthy state of the streets, a circumstance

---

[12] *Collezione di bandi . . .*, p. 37.

[13] *Ibid.*, p. 56.

[14] De Boisgelin, L., *op. cit.*, p. 79. Robert, *Mémoire sur la topographie physique et médicale de Malta*, Paris, 1802, p. 14.

[15] Burrell, W. H., *Appendix V to the Second Report on Quarantine*, London, 1854, p. 37.

[16] *Collezione di bandi . . .*, p. 106.

'known to have been the cause of pestilence' in other parts of the Mediterranean.[17] This observation is of great interest in view of the outbreak of plague which occurred in the following year.

A campaign for street cleanliness was started by the government in 1818. Shopkeepers and street-vendors were repeatedly warned not to litter the streets with deteriorated fruits and vegetables while stress was made on the need for domestic cleanliness. Town residents were instructed to dump their house refuse into the streets at sunrise to be collected by the dustmen and carted away from the town. The streets of Valletta were cleaned every morning but those of the other cities were only cleared of litter twice a week, the refuse that accumulated in the interval being usually removed by the countrypeople who made use of it as field manure.[18] Co-operation on the part of the mass of the people was not, however, forthcoming. It was found almost impossible to persuade them to conform to sanitary regulations since they were not educated enough to see the connection between the measures taken by government and the preservation of their own health. Unfortunately the police themselves were not keen in enforcing the regulations so that one is not surprised to find recorded that every street in Valletta was in 1819 reduced to such a filthy state as 'to prejudice the health and well-being of all classes'.[19] Appeals to the aesthetic sentiments of the inhabitants of 'such a beautiful city as Valletta' were equally unavailing. It was no uncommon occurrence then for passers-by to answer the call of nature in the street, a habit that the government sought to stamp out by the infliction of fines and imprisonment on a diet of bread and water for twenty-four hours.[20] This habit of urinating in the street corners of Valletta had not disappeared by 1870 and squads of men 'with water pails and lime, sweeping and washing' these street corners were a common sight[21] while even as late as 1905 complaints were being voiced by the residents of Floriana that the vast number of people that passed through the suburb from the countryside to Valletta every morning used the surrounding fortifications as a latrine.[22] In Senglea, Bormla and Birgu pigs and other domestic animals still roamed without restraint in the streets until the government thought it fit, in 1820, to extend to these towns the same provisions originally applied to Valletta whereby any person catching an animal in the streets became entitled to its possession.[23]

Street sweeping was performed by convicts condemned to hard labour. An English traveller describes the scene in Valletta in 1834: 'The business of cleaning the town is performed by convicts, some drawing a cart, and a party of five or six sweeping and shovelling attended by two soldiers with bayonets in their hands. The poor convict scavengers are all in chains, which make a melancholy clanking noise, and those who are condemned for life have irons on both their legs.'[24] 'Free labourers' instead of convicts were first employed in street cleaning in May 1839.[25] The removal of refuse from the streets was subsequently entrusted to the Police Department, the actual cleaning being done by private contractors.[26] Very little progress had been achieved in street hygiene by the mid-century. Vegetable hawkers still dropped unwanted leaves, fruits and stems in the streets to which were added the skins and offal of animals discarded by housewives and the excreta of the large flocks of goats that were daily driven to the towns to supply the inhabitants with milk.

---

[17] Blaquière, E., *Letters from the Mediterranean*, London, 1813, vol. ii, p. 370.

[18] Police Regulations of 16th March 1818.

[19] Government Notice of 27th December 1819.

[20] *Ibid.*

[21] *Il Mediterraneo*, 10th September 1870, p. 9.

[22] *Reports of the Commission for the Investigation of Mediterranean Fever, part II*, London, 1905, p. 16.

[23] Government Notice of 17th February 1820.

The maintenance of street hygiene was not simply a matter of providing public scavengers but was inseparably bound up with the proper surfacing of roads and streets, the delivery of milk to town residents and the organisation of a system of house-refuse collection. The construction of proper thoroughfares had been neglected by the Order. While some of the streets were paved with hard stone the so-called roads of the period consisted of tortuous narrow cart tracks surfaced with soft friable limestone. Indeed the only road worth mentioning built in the time of the knights was the one leading from Valletta to Mdina. From 1810 onwards a network of roads to link various defence points in the Island began to be laid down by the British military authorities. Things took a turn for the better and continued to progress following the formation, in 1860, of a Public Works Department,[27] but the state of the streets was still far from being satisfactory. They had no regular drainage, no proper barrelling or grading, and gully-grates were often untrapped and offensive.[28] The mud and pools of winter gave place to clouds of dust in summer when the lightest breeze arose. Winds took up such volumes of dust that the eyes and fauces were clogged with it, the particles of dust being so fine that they penetrated into the works of the best 'cased watches, even in the pocket'.[29] The part played by dust in the causation of disease was then already occupying the attention of medical men in Malta. Dew-moistened dust was by some incriminated as the cause of the plague of 1813; others, while rightly refuting this opinion, came nearer to the facts when they pointed out its injurious effects on the eyes and lungs.[30] In 1873, when bacteriology was still in its infancy, a warning was sounded in the Maltese medical journal *Il Barth* about the adverse effects on health of the inhalation of germ-laden dust originating from the badly macadamised streets and roads.[31] This dust-theory of disease was still prevalent in the early decades of the twentieth century. Contaminated dust was blamed for the spread of undulant fever and newly turned earth dug up during the laying of sewers was also held responsible for outbreaks of this fever.[32] The amount of dust increased as mechanised means of transport began to replace horse-drawn vehicles. As traffic became heavier, the unsuitability of macadamised thoroughfares became obvious. To reduce the amount of dust to a minimum, the surfacing of streets and roads with asphalt and bituminous compounds began to take the place of the older methods in 1930.[33]

---

[24] Waring, G., *Letters from Malta and Sicily*, London, 1843, p. 75.

[25] *Malta Government Gazette*, 31st March 1840, p. 16.

[26] *Malta Government Gazette*, 5th November 1881, p. 287.

[27] *Times of Malta*, 20th March 1953.

[28] *Malta Royal Commission of 1912, Minutes of Evidence*, p. 120. Sutherland, J., *Report on the Sanitary Condition of Malta and Gozo*, London, 1867, p. 35.

[29] Hennen, J., *Sketches of the Medical Topography of the Mediterranean*, London, 1830, p. 446.

[30] *Ibid.*, p. 447.

The elimination of the goat from the streets was not easily accomplished. The practice of delivering milk to town residents by driving goats to the door of the purchaser's house was a very long standing one. To supply all the inhabitants many herds of animals had to be conducted along the roads leading from the villages to the towns and then through the streets of the towns themselves. 'Everyone who is familiar with the streets of Valletta is also familiar with the smell of these streets' wrote the members of the Mediterranean Fever Commission in 1907. In every gutter were to be seen collections of goats' urine. The Commission did not hesitate to recommend the prohibition of the perambulation of goats through the streets of the towns[34] but no steps were taken to implement this suggestion. By 1920 two thousand four hundred goats were entering Valletta daily so that the extent of street pollution by their excreta can be imagined. There had been many complaints from both private and official sources about the insanitary condition of the streets produced by these animals and the suggestion to prohibit goats from entering Valletta was renewed by the Commissioner of Police.[35] It was found that this measure could not be carried out before some other means for a prompt and adequate supply of milk to town residents had been devised. The question of the distribution of milk was finally settled eighteen years later when a Government Pasteurisation Centre was inaugurated in May 1938.[36] As soon as pasteurised milk became available in sufficient quantities the sale of raw goats' milk was prohibited in Valletta and goats and other milch animals were no longer allowed, from the 1st February 1939, to be led or driven or kept in any street of the city. Later in the same year this provision was extended to other urban areas and in this way the goat finally made its exit from the streets of our towns.[37]

---

[31] *Il Barth*, 21st February 1873, p. 241.

[32] *Reports of the Commission for the Investigation of Mediterranean Fever . . .*, p. 42.

[33] *Times of Malta*, 20th March 1953.

[34] *Report of the Commission for the Investigation of Mediterranean Fever, Part VI*, p. 136; *Part VII*, pp. 234 and 257.

[35] *Malta Government Gazette Supplement* of 22nd September 1920, p. 249.

[36] *Report on the Health Conditions of the Maltese Islands for the year 1938*, p. xv.

[37] Government Notices Nos. 501 and 504 of 1938; Nos. 314, 315 and 323 of 1939, *Malta Government Gazette*, 14th July 1939, pp. 917, 983; 23rd December 1930, pp. 1434, 1436.

The next problem calling for a solution was the collection and disposal of house-refuse. In 1887 the subject was officially brought to the attention of the government. The collection of house-refuse was carried out by country-boys who deposited it in fields to be turned into manure. While it was fully realised that a more efficient and reliable means of refuse collection was needed no active steps were advocated. Even those who condemned the existing state of affairs were reluctant to go against the prejudices of the masses and the financial interests of a few farmers. Indeed they simply advised the government that 'the people must be led to adopt a better system, not forced'.[38] This attitude of *laissez-faire* persisted for many years until Dr. G. Caruana Scicluna, the Acting Chief Government Medical Officer, suggested in 1905 the municipalisation of the gathering of house-refuse and the installation of a refuse destructor.[39] Still no action was taken although several official committees were appointed to study the question. The official reason for this delay was that it was inadvisable to come to a decision before more knowledge of the methods used in other countries had been gained;[40] but as the public continued to press for the adoption of a proper and sanitary system of house-refuse collection and disposal, another committee was appointed in 1936 to reconsider the question and submit recommendations. This committee reported in November of the same year and, after condemning the prevailing unhygienic and offensive methods of refuse collection, concluded that the government should undertake the responsibility of refuse collection and disposal in accordance with modern hygienic principles. They recommended the purchase of a fleet of motor vans, the erection of disposal plants and pulverisers for the destruction of street sweepings and house-refuse and the co-ordination of all public cleansing arrangements under one authority.[41] The scheme was approved by the government and put into operation in September 1937, the service being extended to various areas during the following years, including army establishments.[42]

---

[38] Chadwick, O., Schinas, G. C., Agius, P. P., *Report on the Sanitation of Notabile and Rabato*, Malta, 1887, p. 4.

[39] *Malta Government Gazette Supplement*, 20th October 1905, p. x.

[40] *Malta Government Gazette Supplement*, 28th October 1930, p. 1181.

[41] 'Committee on Refuse Collection and Disposal', *Malta Government Gazette Supplement*, 16th November 1936.

[42] *Report on the Health Conditions of the Maltese Islands for 1937*, p. xix.

CHAPTER 34

Water Supply

THE provision of a plentiful and drinkable supply of water constitutes Malta's perennial problem. In the absence of rivers and lakes the country depends for its provision of potable water upon the geological formation of the Maltese Islands and upon the local rainfall, the quantity of water available for drinking and household purposes varying directly with the amount of rain falling and collected during the winter months. Up to the sixteenth century the inhabitants of the towns and villages relied for their supply of water solely on the amount of rain water that they were able to collect from the roof-tops and from the streets. The water thus collected was stored in private tanks and public reservoirs dug out of the rock beneath the houses, the streets and squares. Remains of neolithic, Punic, Roman and medieval water cisterns still exist in various parts of the Island.[1] In the days of the Order of St. John of Jerusalem the construction of water cisterns was enforced by law. Section 5 of the 'Capitoli' governing the building of houses in Valletta and promulgated in February 1569 by Grandmaster Pietro del Monte laid down that any person erecting a house in the new city had to provide it with, among other necessities, a water tank proportionate to its size.[2]

Rain water falling on uninhabited areas is absorbed by the strata of porous limestone lying beneath the superficial soil. Underneath the porous layers there is an impermeable stratum of blue clay which does not allow the water to soak through but causes it to be retained and eventually to gush out in the form of springs. These springs were first utilised as a source of water supply for household purposes in the early seventeenth century when Grandmaster Alophius Wignacourt, who formerly occupied the post of Grand Hospitaller, ordered galleries to be excavated and a stone aqueduct to be constructed on the Roman plan for the conveyance of water from various springs arising in the area of Djar Handul to the north of Dingli. This work, begun in 1610, was completed in April 1614. Once the water reached Valletta it was distributed to private and public reservoirs by means of underground stone channels. Several fountains were erected in the city, the principal ones being in the Palace Square, near Porta Reale (Kingsgate) and at the Marina; thus the residents of Valletta were able to rely on a more constant water supply all the year round and to obtain relief from their old fears of drought. A senior knight was charged with the supervision of the public fountains and tanks and had to see that they were kept clean and maintained in a good state. By 1723 there were fifty-three water reservoirs in Valletta and Floriana, twenty-one of which were open to the public.[3]

---

[1] Zammit, T., 'The Water Supply of the Maltese Islands', *Archivum Melitense*, n.d., ii. 1.

[2] Borg Cardona, S. R., 'The "Officio delle case" and the Housing Laws of the Earlier Grand Masters 1531–1569', *Law Journal*, 1951, iii. 39.

A decree of the 6th September 1669 prohibited the washing of hands, clothes and other objects in the fountains of Valletta under penalty of a flogging for men and boys and of banishment from the city for women offenders.[4] In the following century special laws and regulations were enacted with the aim of securing a better storage of water in the towns and of protecting its purity.[5] The watering of animals and washing of clothes were permitted only in certain specified fountains in Valletta, Floriana, Mdina and the citadel of Gozo.[6]

Various attempts were made during the first half of the nineteenth century to increase the water supply of the Island but the importance to health of an adequate provision of water was only recognised after the 1865 cholera epidemic when, though as yet no direct connection of this disease with the water supply had been thought of, serious suspicions were entertained about the part played by the water supply in the spread of the epidemic.[7] It must be noted, however, that as early as the first quarter of the century attention had been called to the unhygienic quality of the water. Tanks situated in the vicinity of sewers had become polluted by the contents of the drains which percolated through the rock and imparted a disagreeable flavour to the water. Innumerable animalculi of the order of infusoria, together with other impurities of a vegetable kind, contributed to water contamination. Quicklime was added to the tanks to correct these impurities but the most effectual means recommended was the breeding of live eels in the tanks which cleared the water from living organisms in a very short time.[8] In 1867 John Sutherland emphasised the need for the provision of a pure supply of water after describing the state of the storage tanks in that year. 'In not a single instance', he said, 'was the water drawn from these tanks at the time of this inquiry fit for cooking or drinking. It was generally discoloured and more or less offensive both to taste and smell. In some cases it was distinctly and strongly impregnated with sewage, in one instance to such an extent that the well had been built up and the people, fortunately, had to find water elsewhere . . . So obviously impure and unfit for use were these tank waters that I considered it quite unnecessary to send specimens to England for analysis . . . If the condition of water in (cholera) affected houses as I saw it represents in any degree what it was when Malta was threatened with cholera it would scarcely be necessary to seek for any other predisposing cause of disease than the bad quality of the water, arising, not from impure sources but from a most dangerous method of storing and distribution in the houses'.[9] The tanks in the villages were no less objectionable. In fact they were generally in proximity to dung rooms and most of the water samples examined by Dr. Sutherland bore evidence of the presence of organic matter. All the cholera deaths in the villages during the cholera epidemic of 1865 occurred in houses where the water supply was open to this contamination.

---

[3] Zammit, T., *Valletta—An Historical Sketch*, Malta, 1918, p. 41.

[4] Manuscript 439, fol. 388, Royal Malta Library.

[5] Manuscript 429, Bandi 1722–36, fol. 14, Royal Malta Library. *Leggi e costituzioni prammaticali*, Malta, 1724, p. 10.

[6] *Collezioni di bandi*, Malta, 1840, p. 32.

[7] Zammit, T., 'The Water Supply . . .', p. 15.

[8] Hennen, J., *Sketches of the Medical Topography of the Mediterranean*, London, 1830, p. 475.

Not only the quality but also the quantity of the water was poor. The amount of water at the disposal of the people was inadequate for the development of habits of personal cleanliness and this deficiency accounted for the foul condition of body found in fever patients admitted from the villages into the Central Hospital in 1865.[10] Sutherland stressed the imperative need, from the public health point of view, for an increase in the supply of water to enable every house to be adequately provided. He also advocated a change in the existing system of distribution to protect the water from pollution. In spite of these recommendations, only the inhabitants of Valletta, Floriana and the Cottonera district together with a few villages, had been provided with aqueduct water up to 1882. The rest of the Island had still to depend on rain water gathered in cisterns for its domestic needs and the dangers of contamination had not disappeared. The pollution of catchment areas with manure and other waste matter was unavoidable. Another source of fouling was derived from the fact that aqueduct water ran in stone channels laid underneath the street surface very close to the drainage conduits which, being made of porous stone, allowed the escape of faecal matter and its penetration into the water channels. It is not surprising, therefore, that under these conditions the propagation of water-borne disease was an easy occurrence and that the sanitary authorities felt compelled, on many occasions, to condemn the water supply and to cut off portions of it.

In 1883 Mr. Osbert Chadwick was called to Malta to find ways and means of improving the water situation of the Island. As a result of his suggestions new galleries and several pumping stations to raise the water to the surface were constructed. A number of public cisterns that were found to be liable to pollution were emptied and put out of use while others were cleaned and protected from possible contamination. Water under pressure was laid on in the towns so that water could now be carried up to the top of the houses. Public taps were also placed in the streets to bring an adequate supply of water within reach of the poorer section of the population.[11] More galleries and shafts were dug following another survey by Chadwick in 1897 and the water system was extended further. The impounding of water in an open space for agricultural purposes was tried in 1885–86 and this method would have been further developed had not an epidemic of ague been traced to such a collection of water. To obviate the risk of other outbreaks the water was allowed to run freely to the sea and the scheme of impounding water abandoned.[12]

---

[9] Sutherland, J., *Report on the Sanitary Condition of Malta and Gozo*, London, 1867, p. 40.

[10] Sutherland, J., *op. cit.*, p. 40.

In January 1910 a slight outbreak of typhoid fever occurred in Valletta, Floriana and Sliema. The Superintendent of Public Health was instructed by the Governor to investigate the cause of the epidemic. Although as early as 1861 Dr. Sutherland had demonstrated that house tanks were liable to pollution and that an improved method of water supply was required,[13] no special attention had been given to the quality of the water by the government which was concerned with the sufficiency rather than the purity of the water. The sanitary authorities, however, were quite aware of the dangers inherent in the water system; indeed soon after the 1910 outbreak they suggested the cutting off of one of the Wignacourt springs, known as Buzigrilla, in the hope of shortening the epidemic. The bacteriological examination of the water had revealed the presence of *coli bacilli*, due mostly to the filtration of organic matter inside the stone conduits, stretches of which were found to be improperly sealed and otherwise exposed to contamination. This state of affairs induced the Governor to nominate a commission under his chairmanship to study the whole question and to make suggestions for the prevention of future outbreaks. The commission came to the conclusion that the most efficacious remedy was that of replacing the stone conduits by iron tubes. This work was started in September 1910 and brought to completion in 1912.

The typhoid outbreak of 1910 made the bacteriological examination of water imperative. Bacteriological studies of the water supply were conducted under the direction of Prof. (later Sir) Themistocles Zammit who, as a result of researches and experiments made jointly with Major A. H. Morris, R.A.M.C., proposed in 1912 the addition of about seven pounds of chlorinated lime to every million gallons of water to render it safe for human consumption. This suggestion was carried into effect with very satisfactory results.[14] Since then the water supply has been examined at frequent, regular intervals and its purity maintained by chlorination through automatic chloronomes and chlorographs.[15]

When the First World War broke out in 1914 and Malta was turned into a huge military and naval hospital for allied servicemen, the need for an abundant water supply soon became obvious. Its extension was immediately taken in hand and under the pressure of the exigencies of war was ready by August 1916. Thus by the end of the war twenty-seven military hospitals—with a population that at times reached twenty-three thousand patients—had been adequately provided with wholesome water; thousands of tons were also shipped to Mudros where it was very scarce. In 1919 more wells and galleries were sunk. The tapping of these fresh sources augmented the provision of water to such an extent that by 1921 the number of public fountains was over four hundred and fifty while nearly 'every shop, every house and every palace' was provided with an abundance of good drinking water.[16] The remotest village could 'boast of a standpipe in the church square' and this achievement was considered to be the greatest form of praise that could be bestowed on the government of the day;[17] by these advances, however, the supply of water for all purposes did not exceed ten gallons daily per head of the population. In 1921 the Governor realised that in the interests of health a larger amount was required and that, therefore, water works deserved priority in any future programme of public works.[18] Considerable progress has been made since then in the provision of catchment areas and storage but there has also been a considerable increase in the population of the Maltese Islands; apart from this increment there has occurred a striking rise in the people's standard of living and hygiene with a consequent greater demand for water.[19]

---

[11] Pisani, S. L., *Report on the Cholera Epidemic in the Year 1887*, Malta, 1888, p. 17.

[12] Zammit, T., 'The Water Supply . . .', p. 24.

[13] Sutherland, J., *op. cit.*, p. 32.

[14] Mercieca, V., 'L'acqua di Malta', *Archivum Melitense*, 1929, viii. 69. Zammit, T., 'The Water Supply . . .', p. 39.

[15] *Report on the Working of the Water and Electricity Department for the year 1951–52*, in *Malta Government Gazette Supplement*, 10th April 1953, p. 117.

---

[16] Mercieca, V., *op. cit.*, p. 69.

[17] Zammit, T., 'The Water Supply . . .', p. 42.

[18] *Malta Government Gazette*, 4th November 1921, p. 1012.

[19] *Malta Government Gazette Supplement*, 10th April 1953, p. 118. *Times of Malta*, 16th August 1956, p. 6.

CHAPTER 35

Drainage System

THE first project for a drainage system appears in the 'Capitoli', or regulations, already mentioned (Chapter 34). Every house had to be provided with a water cistern and a cesspit, the latter being provided with a conduit leading from the house to the main street-drain into which the waste material of the houses was discharged.[1] Some modifications in the original system were introduced in 1615 following the construction of the Wignacourt aqueduct and again in the time of Grandmaster Em. de Rohan (1775–97). These improvements heralded the more extensive and modern alterations of the nineteenth century[2] when the proper and complete removal of all sewage matter from houses and its disposal without prejudice to health became one of the main, if not the main, concern of sanitary reformers; and yet no sanitary project ever met with so much opposition in Malta as the development of the modern drainage system.[3]

The Maltese Government contemplated the introduction of the water carriage system of drainage in the towns in 1858. The scheme received the approval of Dr. Sutherland and Capt. Galton who had conducted an inquiry on the subject. They found that the sewers were constructed of porous material without reference to sectional area or inclination. They were not flushed with water so that there was no possibility of clearing out the deposits in the conduits. Their outlets were offensive especially during the hot weather. Sutherland and Galton recommended the substitution of the porous channels by impervious glazed pipes of suitable section, the trapping of all street gratings and the provision of special arrangements for flushing and ventilating the main sewers[4] to prevent the emission of drain gases into the streets and houses.

After the sewage of Senglea, Bormla and Birgu was collected, it was poured into the Grand Harbour through several outlets. As the Mediterranean is practically a tideless sea, the want of a rapid circulation of water inside the creeks of the harbour caused large areas of the sea-surface to become charged with offensive matter the smell of which permeated the towns—a state of affairs that existed not only in Malta but in many Mediterranean ports where the drainage found its way into the sea.[5] This stench was blamed for the occurrence of fevers, diarrhoeas, dyspepsia and even cholera. It was, therefore, insisted that the sewage should be diverted to some distant place to be discharged into the sea at a point where the sea currents would prevent its return into the harbour.[6]

---

[1] Borg Cardona, S. R., 'The "Officio delle case" and the Housing Laws of the Earlier Grand Masters 1551–1569', *Law Journal*, 1951, iii. 39.

[2] Mifsud, A., *Knights Hospitallers of the Venerable Tongue of England*, Malta, 1916, pp. 293 and 301.

[3] Report on the Health of the Maltese Islands for the year 1936, *Malta Government Gazette Supplement*, 3rd August 1937, p. xix.

[4] Sutherland, J., *Report on the Sanitary Condition of Malta and Gozo*, London, 1867, p. 44.

The house drains were in free communication with the public sewers and numerous ventilating shafts were fixed inside the houses and opposite their windows in the street, giving rise to foul odours that invaded the interior of many houses.[7] In some places, such as Bormla, the ammonium hydro-sulphide that escaped from the untrapped drains blackened the silver articles in the houses. There were upwards of one hundred and eighty openings in the three cities, the effluvia originating therefrom causing the people in the streets to stop their noses with handkerchiefs to avoid the smell.[8] Following Dr. Sutherland's report on the sanitary condition of the Island in 1867, the first impetus was given to Dr. A. Ghio's suggestion of setting up an adequate ventilation of the sewers by means of long metallic chimneys erected on high points along the course of the conduits. When, later on, the Governor Sir Patrick Grant (1867–72) reported on the disadvantages of the badly constructed sewers, an engineer was sent over from England to study the problem. As a result of this investigation, it was proposed to discharge the sewage into the sea at Zurrieq, but the scheme was not adopted for financial reasons as it was estimated that an expenditure of two hundred thousand pounds was involved. Another scheme had as its aim the discharge of the sewage of Valletta and Floriana into the sea near Fort St. Elmo but this plan, too, was abandoned as after various experiments it was ascertained that the material flowed inside the two ports. At this juncture the introduction of the dry-earth system was advocated—a method which found favour with some of our medical men[9] and which had been put into operation in some of the Charitable Institutions in 1871. It turned out to be a complete success from the sanitary angle in all the hospitals where it had been tried, but great difficulties were experienced in ensuring the constant supervision and attendance that it required and in the removal and disposal of the sewage.[10] It was, therefore, obvious that such a method could not be carried out on a large scale; besides, apart from the difficulties already mentioned, the introduction of the dry-earth system involved a radical change in the network of conduits already in existence. The choice before the government was between proposals that would have brought about a radical solution to the whole question but which were beyond the financial resources of the treasury and proposals which, though practicable from the financial aspect, afforded only a palliative remedy.[11] In the meanwhile attempts were made to deal with the problem in 1872 and 1875 when, at the suggestion of the Admiralty, an endeavour was made to stop the pollution of the waters in Dockyard Creek.[12]

---

[5] Galton, D., and Sutherland, J., *Report of the Barrack and Hospital Improvement Commissions on the Sanitary Condition and Improvement of the Mediterranean Stations*, London, 1863, p. 85.

[6] *Il Barth*, 23rd January 1872, p. 105.

[7] Casolani, C., *The Sanitary Question in Malta*, Malta, 1880, p. 9.

[8] *Il Barth*, 6th March 1875, p. 490.

[9] *Ibid.*

[10] Letters to Government from 5th March 1869 to 31st January 1872, fol. 474. Letters to Government from 23rd March 1883 to 20th April 1888, fol. 775, Medical & Health Archives, Valletta.

The remodelling of the drainage system was earnestly taken in hand in 1878 by the Royal Engineers according to a plan prepared in that year to which the Maltese Government contributed financially.[13]

The voting of the money for the conversion of the drainage to the water-carriage system raised a storm in the Council of Government in March 1879. The policy of the government was criticised by the elected representatives of the people and also formed the subject of a petition to the British Parliament. The elected members were not averse to the introduction of sanitary reforms but they feared that the projected water-carriage system would be inefficient and injurious to health because existing conduits were not regular drains but mere 'prolonged cesspools' cut in the rock. They also envisaged that, on account of the scarcity of water for the domestic requirements of the population, the water-carriage system was impracticable as there would not be a sufficiency of water for use as a carrier in the removal of sewage. They considered that the problem of drainage and the problem of the water supply necessarily went together and that the former could not be adequately tackled without providing first and foremost an ample supply of water.[14] In spite of the fierce opposition of the elected members, the government obtained the necessary money by the votes of the official majority and the remodelling of the drainage was finally completed in 1885. The old sewers dug by the Knights in the porous stone were replaced by new ones laid on modern principles along the bottom of the old conduits, their upper portions being utilised for the collection of storm water.[15] House drainage was remodelled in the towns and the sewage removed by steam power to an outfall in the sea at some distance south of the Grand Harbour instead of flowing into its waters which were previously 'of a chocolate colour blistered all over with escaping gases along the shores'.[16]

The cholera epidemic of 1887 focused attention on the insanitary state of the villages and showed the necessity of extending the drainage to the country districts where the only means of house sewerage was the cesspool. The sanitary law prescribed that the cesspool should be water-tight and placed beneath the street. Contrary to this provision, however, the cesspools were generally dug beneath the house itself and very often leaked into the surrounding rock and soil. The cesspool system was condemned by a Commission composed of Osbert Chadwick, G. C. Schinas and P. P. Agius appointed to report on the sanitation of Mdina and Rabat on the 21st December 1886. They advocated its substitution by pipe-drains laid beneath the streets and flushed with water and connected with sewage farms. The commission, however, did not recommend the general introduction of water-closets in houses as the people were not yet ripe for such an innovation. In fact the commission found that water-closets were not 'suited to the wants of the people who never use them in the manner for which they are intended'; no objection was, however, made to the adoption of the water-closet in the few houses of the well-to-do.[17] To remedy this state of things a scheme was planned in 1889 to extend the drainage system to the countryside but it was not until April 1897 that necessary money was voted by the Council of the Government. Following the formation of a new council, the newly elected members opposed the imposition of new taxes and they, therefore, tried to repeal the decision taken by the previous council; but the Governor Sir F. W. Grenfell was not prepared to tolerate the postponement of this measure any longer and, in spite of the Council's opposition, ordered the preliminary steps for drainage extension to be taken in hand in June 1899. To these works the Imperial Government agreed to contribute 25 per cent of the cost.[18] The task proved to be a slow and painful one. A new obstacle was found in the legal provisions concerning house-drains. The law on this subject was very quaint for while house-owners could be compelled to remodel their drains they were given the option of abolishing them altogether when the health authorities tried to enforce the remodelling of the drains in question. The enforcement of the law, therefore, produced more harm than benefit as it resulted in the abolition of existing drains and the disposal of the filth into the yards, fields and streets.[19] An idea of the insanitary state of undrained villages just before the outbreak of the First World War can be gained from the fact that the sewage was allowed to run on the surface of the public streets. Such large villages as Luqa, Zejtun, Birkirkara, Balzan and Lija had not yet been drained and demanded urgent attention.[20]

---

[11] *Il Barth*, 6th March 1875, p. 514.

[12] *Times of Malta*, 17th March 1953, p. 6.

[13] *Malta Royal Commission of 1912, Minutes of Evidence*, London, p. 103.

[14] Casolani, C., *op. cit.*, pp. 5, 36, 43 and 54.

[15] Hughes, M. L., *Mediterranean, Malta or Undulant Fever*, London, 1897, p. 70.

[16] Pisani, S. L., *Report on the Cholera Epidemic in the year 1887*, Malta, 1888, p. 17.

The hostility to drainage works which characterised political life in the last quarter of the nineteenth century eventually died out and gave place to the opposite reaction—a clamour for the extension of the drainage system to those parts of the Island that were still without it.[21] Many thousands of pounds have been expended on the systematic sewerage of the Island in the last twenty-five years. One serious technical obstacle to the rapid extension of the sewer to certain localities has been the hilly nature of the Islands.[22] The linking of all inhabited localities to the existing system was envisaged in *The Survey of Social Equipment Projects* laid on the table of the Legislative Assembly during the budget debate in January 1953. For the districts of Mellicha and St. Paul's Bay it was proposed to install a sewage purification plant and to apply the purified effluent for manuring and irrigation purposes.[23] This was no new development but rather a reversion to an idea of almost one hundred years ago; indeed a similar project was suggested as long ago as 1867 by Dr. J. Sutherland who pointed out the great advantage that would accrue to local agriculture if the sewage were to be utilised in such a way.[24]

---

[17] Chadwick, O., Schinas, G. C., and Agius, P. P., *Report on the Sanitation of Notabile and Rabato*, Malta, 1887, pp. 1–4.

[18] Despatch addressed to the Secretary of State for the Colonies dated 29th December 1898.

[19] *Malta Government Gazette Supplement*, 20th October 1905, p. x.

[20] *Malta Royal Commission of 1912* . . ., p. 113.

[21] *Malta Government Gazette Supplement*, 16th November 1936, p. 1207.

[22] *Report on the Health Conditions of the Maltese Islands for the year 1945*, p. xv.

[23] *Times of Malta*, 16th January, 17th March and 27th March 1953.

[24] Sutherland, J., *op. cit.*, p. 44.

CHAPTER 36

Housing

Of the hygienic conditions prevailing in the earlier habitations of the Maltese Islands we know nothing as none of these dwellings has survived the ravages of time and man. A few stately homes built in the fifteenth century still stand in the ancient capital of Mdina but being 'palaces' they cannot claim to be representative of housing conditions in medieval Malta.

For many centuries house development was determined by a combination of factors. Social and economic reasons played their part, but it was defence rather than comfort and the preservation of good health that moulded first and foremost the plan and the size of houses during the Middle Ages. The Islands were then very poorly equipped to face foreign invaders and corsairs; as a consequence they suffered heavily at the hands of these raiders. These unsettled conditions were not conducive to the erection of permanent buildings since these were liable, at any time, to be destroyed by a relentless foe. The great mass of the people lived in scattered villages. They dwelt in simple, single-storied rectangular stone houses with a rear courtyard for domestic animals.[1] These habitations were poorly constructed, very low and sometimes covered with reed-roofs which the stormy winds often carried away.[2] Natural caves were also adapted as dwellings and many people were still living in them until 1536.[3] To provide shelter and protection for the inhabitants and their movable property during piratical incursions, two citadels were available. Mdina, the capital, perched on the top of an inland hill was by far the larger of the two. The '*castrum maris*', originally founded by the Arabs in the ninth century and now known as Fort St. Angelo, defended the entrance to the harbour and was the official residence of the feudal lord and governor of the Island. In the shadow of these two fortified places groups of houses eventually grew up which later on developed into the suburbs of Rabat and Birgu respectively. The former became the habitat of the artisan and commercial classes while the latter formed the centre of the maritime community.

When in 1530 the Knights of St. John, accompanied by their followers and Rhodian refugees, established their Convent or headquarters at Birgu a critical situation in housing conditions arose. The houses at Birgu, which were far from spacious, proved insufficient to accommodate all this multitude so that many of the newcomers had to live for a time under canvas. The housing problem was, therefore, one of the most pressing that the Order had to face; in fact, owing to the shortage of houses, the Order's first concern was the regulation of the lease of dwellings and the establishment of a fair rent. For this purpose a tribunal, called 'Officium Commissariorum Domum', was created in 1531 to deal with the various difficulties arising out of the big demand for houses. It appears that by 1551 the housing situation had improved considerably so that when in that year the French traveller Nicolay visited Birgu he was loud in his admiration for its beautiful houses and palaces each of which was provided with its own water-cistern.[4]

---

[1] Braun, H., *An Introduction to Maltese Architecture*, Malta, 1944, p. 7.

[2] Dessoulavy, C. L., 'Visitors to Malta from the 15th to the 18th Century', *The Sundial*, 1940, iii. 99.

[3] Dessoulavy, C. L., *op. cit.*, p. 98.

Attention to domestic sanitary requirements came years later when the 'Commissione della Fabbrica' was set up in the time of Grandmaster Pietro del Monte (1568–72) to regulate the building of houses in the new city of Valletta. Although the erection of the city had been approved by the 'Venerandi Sexdecim', the supreme legislative assembly of the Order, as far back as 1555, the first stone could not be laid until the 28th March 1566. The original intention was to level down the ridge of rock of the promontory on which Valletta now stands and then to build the city on the platform thus formed but before this project could be carried out rumours of a Turkish invasion reached the Island. It was, therefore, decided to hurry the building of the city and, to save time, the idea of levelling the rock was abandoned with the result that except for a short central strip, which to-day forms Kingsway, the city was erected on the slopes of the hill. The fortifications were raised first. The enclosed area was then distributed in blocks separated by longitudinal and transverse streets on the grid-iron system. After the laying out of the streets private individuals and knights were invited to build houses. The buildings which they erected are remarkable for their architectural stateliness and for the spacious and lofty reception rooms but the sleeping quarters were narrow, confined and few in number.[5] A series of building regulations was approved by the Grandmaster and Council in May 1569. A few of these dealt with domestic sanitation as already described (Chapters 34 and 35). A large open space to the south-west of Valletta enclosed by the fortifications and outer ramparts of the city was reserved for the reception of the country-people in the event of a siege. The intention was to accommodate these refugees in tents and other temporary dwellings and thus prevent them from overcrowding Valletta, with the attendant danger of some epidemic outbreak.[6] The city grew and prospered. When seen a century later it captured the imagination of one of the earliest English visitors to Malta, the Rev. Henry Teonge, chaplain on board H.M.S. *Assistance*, who declared: 'Let it suffice to say thus much of this place viz: Had a man no other business to invite him yet it were sufficiently worth a man's cost and paines to make a voyage out of England on purpose to see that noble city of Malta and their (the knights') works and fortifications about it.'[7]

---

[4] Dessoulavy, C. L., *op. cit.*, p. 98.

[5] Porter, W., *The Knights of Malta*, London, 1884, p. 278.

[6] Mifsud, A., *Knights Hospitallers of the Venerable Tongue of England*, Malta, 1916, p. 295.

The nineteenth century was ushered in by great commercial activity in the Island. The constant influx of foreigners and of British residents brought about a great demand for accommodation in Valletta. The consequence was that the landlords raised the rents and gave notice to the poorer tenants to quit. Many of the inhabitants were thus obliged to abandon their homes to make room for wealthier tenants. It often happened that they were turned out into the streets with their numerous families without the means of procuring a habitation. There was only one solution out of this crisis—the settlement of the homeless in the suburbs and in the adjacent villages; but even this remedy could not be applied because in the countryside the population had outstripped the number of houses and the dwellings already in existence bore no relation to the number of families asking for house-covering.[8] Such were the housing difficulties in 1812 when an unexpected outbreak of plague in the following year eased the situation in a few months by its heavy mortality and consequent decrease in population.

The architecture and the light colour of the stone façades of the houses of Valletta gave the town a clean, bright appearance. Their workmanship, the loftiness of their rooms, their abundance of doors and windows and balconies excited the admiration of the Head of the Army Medical Department who declared in 1821 that 'in no part of Europe are the dwellings, generally speaking, superior to those of Malta'.[9] Sir Walter Scott was so enamoured by them that he exclaimed that the town was 'really quite like a dream';[10] but there was a more gloomy side to this picture for the homes of the common people presented quite a different aspect in marked contrast to the town's external appearance.

The sanitary state of habitations, especially those of the working classes and the indigent, was neglected. By the mid-nineteenth century the dwellings of Valletta could be grouped into three categories with regard to their hygienic state. First—and worst—there were the cellars consisting of a single room, its only means of light and air being the street-door; they were dark, filthy and foul smelling. Those with a vaulted roof had a wooden floor placed about the spring of the arch, the partition thus formed affording sleeping space for some members of the family.

---

[7] Teonge, H., *The Diary of Henry Teonge*, London, 1825, p. 48.

[8] *Report of His Majesty's Commissioners for Enquiring into the Affairs of Malta*, 1812, p. 204, Royal Malta Library.

[9] Hennen, J., *Sketches of the Medical Topography of the Mediterranean*, London, 1830, p. 463.

[10] Lockhart, J. G., *Memoirs of the Life of Sir Walter Scott*, London, n.d., vol. ii, p. 337.

These were the habitations of the poorest class of artisans in which they lodged their numerous families and carried on their trades. In summer the air inside these hovels was so stifling that the inmates deserted them during the night to sleep outside on the pavement. Secondly, there were the so-called '*mezzanini*' which were constructed above the rooms just described. They were inhabited by a better class but except that they were provided with windows they had little advantage over the rooms underneath. They were small, ranging in height from eight to ten feet, dark and ill ventilated. Thirdly, there were the houses of the well-to-do which presented a marked contrast to the other dwellings. They had an abundance of windows and the rooms were large, lofty and elegantly decorated. Their drains, however, were so defective that a foul odour of sewage was immediately perceived on entering many of them during the hot season.[11]

The cholera epidemic of 1865 was instrumental in focusing attention on the unhygienic state of the homes of the poorer classes. The Relief Committee set up at that time describes them thus: 'The condition of the major part of the houses was in direct contradiction to the most common rules of hygiene. Humid, obscure and very badly ventilated they seem to offer the most advantageous conditions for the development and propagation of epidemics. The number of persons who ordinarily occupy these habitations is greatly out of proportion to their size. Not infrequently, members of this committee have had occasion to see families of seven or eight persons enclosed in one sole narrow room which, in many instances, had no other opening except the door. Of such dwellings there is no scarcity in the lowest quarters of Valletta; the '*manderaggio*', the so-called *archipelago*,[12] the old abattoir, Fountain Street and St. Joseph Street are full of them—and it was in such places that cholera mostly prevailed. In these dwellings the latrines are ordinarily in a horrible state of dirtiness and emit such an odour as to harm the health of the inhabitants . . . It is truly deplorable not to witness the adoption for the protection of the health of the poor of certain very simple means to prevent the harmful exhalations which art and industry have placed at the disposal of all.'[13] The exhalations referred to by the committee emanated from the untrapped gullies and privies that communicated directly with the main drains and from the so-called 'manure room'; this room, usually opening out of the courtyard or situated in the basement, served as a receptacle for collecting and keeping the domestic filth until it was removed by the police who were then in charge of public cleansing.

There were no real water-closets. In the better type of house the substitutes for these were sloping troughs of porous stone with a hole at the lower end covered by a rough valve which could be lifted up by a wooden handle. The porous stone of the troughs and of the conduits connecting them with the main sewer soon became saturated with filth which eventually reached the subsoil and sometimes could be seen oozing out through the outer walls of the houses with considerable risk of polluting the underground water tanks. In the poorer dwellings there was a sink in a small court in which the inmates threw all the filth of the house. The water supply in the proper sense of the term was non-existent both as regards quantity and storage and as regards means of distribution.[14]

---

[11] Burrell, W. H., *Appendix V to the Second Report on Quarantine*, London, 1854, p. 34.

[12] Manuscript 10, fol. 306, Royal Malta Library.

[13] *Relazione generale del comitato di soccorso istituito in ajuto dei sofferenti dal colera anno 1865*, Malta, 1866, p. 9.

THE ‘MANDRAĠĠ’

This part of Valletta was the worst slum in existence in the Island. When Valletta was being built in the sixteenth century this site had been reserved for the formation of an artificial harbour on the Marsamxett side of the city to afford a safe anchorage for the Order's ships. Harbours of this type were then called ‘*mandracchi*’—literally a cattle-pen—hence the Maltese derivation ‘*mandragg*’ by which the area became known. As the promontory on which Valletta stands rises for a considerable height above sea level, the construction of the harbour entailed the digging and deepening of an extensive hollow down to below the sea-line. To achieve this end as quickly as possible the government decreed as early as 1562 that anyone building a house in the new city had to hew the stone from the site on which the harbour was to be constructed. Although in some old prints of the layout of Valletta this inner harbour is shown as a completed sea-enclosure the project was never actually brought to fruition. It was eventually abandoned half-way through when the government decided to use the Grand Harbour as the naval port and arsenal. The result was the formation of an immense submerged area that almost reached sea level at its deepest point.

House building on this site started between 1572 and 1600 when space began to become scarce in Valletta. No plans were, however, drawn up so that its miserable dwellings grew up haphazardly into a slum formed of irregularly shaped blocks over an extent of some two-and-a-half acres. There was only one tortuous so-called street which was twenty feet wide at its widest point but only six feet wide along most of its course. This slum soon became one of the most densely populated districts of Valletta. In 1675 its inhabitants numbered nine hundred and forty-two while by 1813 three thousand persons were crowded into it. It is, therefore, not astonishing that it was very badly attacked during the plague epidemic that broke out in that year. In 1821 the ‘*mandragg*’ was receiving the strictures of the medical profession. It was damp, filthy and comfortless and its residents had a sallow, unhealthy complexion. Squalor and dirt enhanced the wretchedness of its unpaved, mazy and cheerless alleys.[15] Its population began to decrease after the plague of 1813 when the survivors gradually migrated to the expanding suburbs of Hamrun, Birkirkara, Pawla and Sliema. By 1888 it had declined to two thousand five hundred and by 1913 to one thousand two hundred, representing a little over 5 per cent of the population of the town. The exodus, however, eventually dried up but the sanitary condition of the area underwent very little change up to within quite recent times. A Medical Officer of Health thus described its appearance in 1938: 'It is so closely built that only the scantiest space is left open to the air . . . Its houses suffering, many of them, from senile decay aggravated by the neglect of landlords and tenants . . . the women folk compelled to perform most of their housework in the street . . .'. The construction of house drains had become an insoluble problem and excretal matter was disposed of in the nineteen water-closets set at intervals along the whole of its crazy street.[16]

---

[14] Sutherland, J., *Report on the Sanitary Condition of Malta and Gozo with Reference to Epidemic Cholera in the Year 1865*, London, 1867, *passim*.

[15] Hennen, J., *op. cit.*, p. 486. Burrell, W. H., *op. cit.*, p. 36.

THE VILLAGES

Rural habitations were also in a very bad state. They were modelled on a very ancient and primitive plan[17] and were not built for healthy living or comfort. They rarely had more than two floors. The first floor, consisting of one or two rooms, was usually occupied by the family. In most cases the rooms had no windows, light and air being obtained only from the door. The ground floor was generally taken up by quarters for animals such as pigs, mules, horses and fowls. No wonder that the courtyards were dirty and swarming with flies. A dung-room, usually beneath a part of the house, received all human and animal excreta and also what was collected from outside the house. This mass of refuse was allowed to ferment under the living rooms and then removed, twice a year, to be spread as manure over the surrounding fields. The water-tank, cut in the rock, was in close proximity to the dung-room so that water bore obvious indications of the presence of organic matter. Apart from its unwholesomeness the water was limited in amount, a circumstance that did not encourage the cultivation of personal cleanliness among the villagers. To this deficiency of water was attributed 'the disgusting state of personal filth' in which cholera patients were admitted into the Central Hospital during the epidemic of 1865.[18] A physician who inspected the village of Dingli during this epidemic found that the inhabitants were in the habit of keeping animals not only within their habitations but even under their own beds.[19]

As late as 1875, in spite of the exertions of the authorities to enforce cleanliness in the village of Zebbug, manure was still stored in 'almost all' the houses where animals were also kept. It was not surprising that this village had become notorious for the prevalence of typhoid and dysentery.[20] At this period the suburbs of Hamrun, Msida, Sliema and St.

---

[16] Critien, A., *The Manderaggio*, Malta, 1938, pp. 25 and 38.

[17] *L'Arte*, 7th January 1865, p. 1.

[18] Sutherland, J., *op. cit.*, p. 77.

[19] Ghio, A., *The Cholera in Malta and Gozo in the Year 1865*, Malta, 1867, p. 33.

[20] Ghio, A., *Second Annual Report on the Mortality in Malta and Gozo for the Year 1875*, Malta, 1876, p. 15.

Julian were taking shape but barring a few houses that were being built on sanitary lines the remaining ones were humid, defective in ventilation and lacking all comforts. The medical profession was loud in its condemnation of these conditions. Dr. Nicola Zammit did not hesitate to declare that 'our houses were perhaps the least in conformity with the requirements of hygiene'.[21]

THE THREE CITIES

Dr. Gavino Gulia exposed the state of the houses of the three cities (Senglea, Bormla and Birgu) in the medical journal *Il Barth* of which he was editor. 'The wretched sanitary condition of some of the dwellings of the poorer classes', he wrote, 'such as . . . houses sublet in several small holdings and rooms on the ground floor, should of course engage the attention of a sanitarian for from most of these abodes, comfort, cleanliness and pure air are banished and they are often the nurseries of epidemic diseases. Most of the houses are night and day charged with sewer emanations.' Overcrowding was extreme in many parts so that when diphtheria or influenza broke out it spread widely from one street to another. 'It is hardly necessary', he continued, 'to emphasise the outrage to decency which must result from the occupation of a single room by eight or ten persons in which all the functions of life are performed. It is, therefore, highly desirable that our legislation should oppose overcrowding and not allow places unfit for habitation to be occupied and thus made a focus of disease.'[22]

MILITARY QUARTERS

The deplorable state of housing was not limited to the homes of civilians only. The sanitary conditions of military barracks, hospitals and married quarters for the troops were hardly better at this period. With few exceptions barrack rooms were deficient in light and ventilation and many of them were overcrowded. Sewers were formed of the same porous material as in the houses of civilians and the drainage was likewise unsatisfactory on account of an inadequate water supply, so that the latrines were dirty and foul smelling. No water was laid on for any purpose so that all water needed for ablution, cooking, drinking and washing had to be raised and carried by hand. Dr. J. Sutherland condemned all the barracks at Malta, with one exception, as being unhealthy and unsuitable for human habitation in some instances. The military hospitals were declared unfit for the reception of the sick and the creation of two new ones was proposed to replace existing buildings. Though the married quarters had an appearance of comfort some of them were dark, damp and ill ventilated.[23]

[21] *L'Arte*, 7th December 1864, p. 1.

[22] *Il Barth*, 6th March 1875, p. 490.

[23] Sutherland, J., *op. cit.*, *passim.*

REFORM

The first individual to take a practical step in the reform of housing conditions and domestic architecture was Dr. Charles Casolani, the personal friend of Cardinal Newman and of Cardinal Manning. In 1858, realising that it is in the dwellings of common folk that 'their mind and character are formed and that their future place in the scale of morality' is determined, he called the attention of His Excellency the Governor, Sir J. Gaspard Le Marchant, to the bad state of habitations in general. He proposed to the Governor the granting by government of its urban property on long or perpetual lease on condition that the grantee would carry out such improvements in the buildings as required by sanitary progress. This proposal was favourably entertained by the Governor. By a public notice of the 24th January 1859 the block of old buildings known as the 'Camerata' was advertised by government for demolition and reconstruction into model buildings for the 'use of the poor industrious classes'. In March of the same year the 'Camerata' was acquired by Mgr. Annetto Casolani and the new block was built after the designs and under the immediate direction of Dr. Casolani himself. When completed the new block with its soil-pans and abundant water supply and a free sweep of air through its rooms was pronounced by Dr. J. Sutherland to be superior in many respects to the workmen's dwellings built in the London suburbs at that time and also to the plans of the 'Maison cité' for which the Emperor Napoleon III had obtained the gold medal at the Paris Universal Exhibition. During the cholera of 1865 there were two hundred and eighty persons living in the new block and yet, although the disease prevailed in neighbouring houses, not a single person in the 'Camerata' contracted the illness.

The site of Villa Franconi at Floriana was similarly granted on lease for the construction, on hygienic principles, of dwellings for the 'use of the poorer classes' in 1861. Following these successful experiments in domestic architecture, the Governor, Sir Gaspard Le Marchant, determined to carry on the work of housing reform by leasing out all one-storied houses and finally all other urban property in the hope that the 'Camerata' and Villa Franconi examples would be imitated by enterprising private owners without the need for resorting to any legislative measures.

The erection of a new suburb with a view to clearing Valletta of its unhealthy tenements was also contemplated in 1858 in connection with the harbour extension at the Marsa but two unexpected events upset these schemes. First, the new 'Camerata', which had been intended for the accommodation of the working classes, was sold soon afterwards and eventually occupied by the wives and families of non-commissioned officers and men stationed in the Island. It is true that such a transfer of property did not in any way detract from the sanitary character of the building but it is equally true that the purpose for which it was originally meant had been defeated.[24] Secondly, His Excellency the Governor was in the end persuaded by his advisers to abandon the new housing schemes as a result of which government property continued to be granted on lease or sold without any conditions being imposed as regards the sanitary requirements of future dwellings with the consequence that the houses constructed thereon were of the worst description. The cry for reform, however, was not stifled. In 1863 Capt. D. Galton and Dr. J. Sutherland advocated better housing conditions with less overcrowding, more adequate ventilation and improved drainage. They also stressed the need for a periodical inspection by a medical officer of health of the dwellings of the working classes to supervise their hygiene and thus diminish the incidence of sickness among them.[25]

Dr. J. Sutherland renewed his recommendations a few years later (1867). He suggested the abolition of dung-rooms, the establishment of a service for the daily removal of refuse from human habitations, the opening of additional window space to improve ventilation, the isolation of water-closets from other rooms, the removal of manure from village dwellings and the provision of an adequate water supply. To encourage the acquisition of better habits of hygiene he advocated the construction of public baths and wash-houses in all towns and villages of the Island. In 1866 a suggestion for the foundation of a new town was made by Dr. Casolani to His Excellency the Governor, Sir Henry Storks. The Governor showed his intention of adopting the proposed scheme but he left the Island before he could carry it out. As nothing was done by his successor, Dr. Casolani presented a fresh proposal to His Excellency Sir Patrick Grant in 1870. The idea was to erect a model town at Ta Xbiex, a plan that was calculated to enable the government to evacuate the '*mandragg*'; this scheme, however, did not materialise.

The question of housing reform was eventually raised by the elected members in the Council of Government in 1875. In the debate that ensued the government defended themselves against the criticism of the opposition on the grounds that no conditions could be imposed on the builders as there was as yet no sanitary building act empowering them to do so. Steps were taken to introduce the necessary legislation and on the 3rd May 1876 the Crown Advocate laid on the Council table a draft ordinance 'To amend the Police Laws in reference to sanitary matters'. The object of this measure was to replace existing tenement houses by model dwellings for the working classes, a step that was considered essential from the public health point of view both for the workers themselves and for the population at large.[26] This draft ordinance met with the opposition of some members of the Council of Government who stigmatised it as a trespass 'upon the rights of property, to authorise infringement of domestic privacy and to impose a new tax'. Another draft ordinance aiming at making houses fit for human habitation was prepared by the Crown Advocate in 1878.[27] Some measure of control had become urgently needed towards the eighteen-eighties as, owing to the ever increasing population, many houses that were previously inhabited by a single family were being converted into tenement houses to be occupied by more than fifty tenants. In other instances large houses had their '*mezzanini*', ground-floors and cellars dismembered from the rest of the building and let as separate tenements. These structural alterations interfered with the ventilation and lighting of the rooms which, in many cases, became damp, ill-smelling and dark. Trapped drains were rare and to be found only in the houses of the better classes; for every one of these houses there were at least ten shops, rooms and lodging houses inhabited by the poorer people with untrapped communication with the main sewer and without the smallest provision for flushing.[28]

---

[24] Casolani, C., *The Sanitary Question in Malta*, Malta, 1880, pp. 29 and 65.

[25] Galton, D., and Sutherland, J., *Report of the Barrack and Hospital Improvement Commission on the Sanitary Conditions and Improvement of the Mediterranean Stations*, London, 1863, p. 94.

[26] *Oggi*, 27th January 1877. *Malta Times*, 8th July 1877.

The cholera epidemic of 1887 exposed the deplorable housing conditions of the time. The insanitary state of the houses was described by the Sub-Committee on House Construction and Provision of Sanitary Dwellings for the Labouring Classes who, in their report, advocated the demolition of defective houses, the erection of workmen's dwellings outside the fortified towns and the proper planning of new inhabited areas. Not all these recommendations were carried out but provision was made in the Police Laws for the preparation of key-plans for building areas. The first such key-plan to be enforced was that for the extension of Zabbar.[29]

The Commission investigating the occurrence of undulant fever in Malta found, in 1905, that 27 per cent of the total number of persons in the Island were living in overcrowded dwellings compared to 12 per cent in England and Wales in 1901. The overcrowding was largely brought about by the common lodging or tenement houses which existed in the towns. For instance more than five thousand persons were living in such houses out of a population of about twenty-four thousand.[30] No building sites were available in Valletta and the three cities and therefore no new houses could be erected inside the towns to relieve this congestion. Old houses that should have been demolished and rebuilt were simply modified by the owners who in this way managed to evade the laws regulating the erection of new houses. Needless to say these modifications fell so far short of sanitary requirements that the acting Chief Government Medical

[27] *Memorandum Submitted to H.E. the Governor by the Crown Advocate on the Draft Ordinance To Amend the Police Laws*, Malta, 1878, pp. 16–17.

[28] *Proceedings of the Select Committee on the Working of the Sanitary Office*, Malta, 1879, p. 7 and Appendix p. 39.

[29] Bernard, A. V., *Report on the Health Conditions of the Maltese Islands for 1937*, p. xxiii.

[30] *Reports of the Commission for the Investigation of Mediterranean Fever, part II*, London, 1905, pp. 4 and 5.

Officer saw no way of hastening the improvement of urban dwellings except by the expropriation of whole blocks and their rebuilding by the government or by private enterprise according to approved plans.[31]

Tenement houses remained for long a source of anxiety to the health authorities. In spite of their efforts to enforce the laws concerning cleanliness and overcrowding in these places the Chief Government Medical Officer had to admit in 1912 that it had been found very difficult to apply the sanitary laws as it was very hard to persuade the tenants to abandon their lodgings; but there was yet a greater obstacle for even if they were prosecuted and driven out of the tenement houses there were no other habitations to put them in.[32] In spite of these handicaps the turn of the century saw the beginnings of a period of progress in housing standards. New houses were being erected on modern sanitary principles in the suburban districts thus affording some relief to the congestion in the towns and healthier home surroundings to the new tenants. These dwellings were airy and well lighted, furnished with proper water-closets and drainage and provided with running water. The bathroom started to make its appearance until it gradually became as accepted and as indispensable a part of the house as the kitchen. The years between the two world wars were marked by great building activity and not only the upper and middle strata of the population but also the working classes were catered for. The idea of constructing a suburb of model dwellings was considered at least as early as 1863 but, though similar suggestions continued to be made at intervals,[33] it was not until the early decades of the present century that it eventually bore fruit. A scheme for the building of blocks of workmen's dwellings was submitted to Parliament on the 17th November 1924 and approved by both houses. The largest blocks were erected between 1925 and 1927 at Rahal Ġdid (Pawla). Similar blocks were put up in the Cottonera area, at Blata-il-Bajda and near Birkirkara.[34]

If the tenement houses presented a disheartening problem, the '*mandraġġ*' constituted a still more formidable one.[35] In 1865 this slum was already engaging the attention of the more progressive members of the community.[36] In a report to the Superintendent of Police the Chief Police Physician, Dr. A. Ghio, stated in July 1865 that this slum 'is the most unhealthy place in Valletta, nor does it admit, in a sanitary point of view, of any improvement; consequently I cannot but suggest the expediency of its being levelled'. Two years previously Galton and Sutherland had declared that the houses in this area were incapable of improvement and that the only remedy consisted in pulling them down, filling up the gap to the surrounding levels and building hygienic houses on its site.[37] In 1867 Sutherland, condemning the slum as being 'the chief epidemic district of Valletta', reiterated his plea for its demolition and rebuilding on sanitary lines.[38] Attention was again focused on this area in 1879 when a mysterious fever broke out among its residents.[39] In 1888 the Cholera Commission declared that reconstruction was the only solution. This radical remedy was repeatedly advocated in subsequent years,[40] but not until 1937, when His Excellency the Governor inspected the locality and himself took the initiative, were the first steps taken for its demolition.[41] An ordinance was drafted aiming at the clearance of insanitary areas and at the provision of better housing accommodation for the working class. An area was considered to be insanitary if there was 'lack of air, space or ventilation, darkness, dampness, absence of water or sanitary accommodation';[42] still two years elapsed before this piece of legislation was passed to enable the government to deal effectively with this slum, and only in 1939 did Ordinance No. XXXV, empowering the Governor-in-Council to order the demolition of buildings unfit for human habitation, become law.[43]

---

[31] *Malta Government Gazette Supplement*, 20th October 1905, p. xi.

[32] *Royal Commission, Minutes of Evidence*, London, 1912, p. 164.

[33] *Malta Government Gazette Supplement*, 28th August 1906, p. x.

[34] *Malta Government Gazette Supplement*, 21st August 1925, p. 243; of 22nd December 1933, p. 1663.

[35] Vella, G. B., *Storja ta Hal Tarxien u Rahal Ġdid*, Malta, 1932, p. 236.

[36] *L'Arte*, 7th January 1865, p. 2.

The outbreak of war in 1939 not only upset all the plans relative to the clearance of insanitary areas but was responsible for a great deterioration in housing conditions. Owing to the frequent heavy air raids between the 11th June 1940 and the summer of 1943 most of the town dwellers were driven to live in crowded underground shelters, tunnels and small rooms dug out of the rock under the walls of the bastions surrounding Valletta and the three cities. Those who could not find such accommodation took refuge in the countryside, giving rise to much overcrowding and a lowering of hygienic standards. The number of houses destroyed or rendered uninhabitable was over fifteen thousand[44] so that for some years after the cessation of hostilities the homeless were still living in the dwellings improvised during the war. Only with regard to the '*mandraġġ*', the war did not prove to be an unmitigated evil. The devastation wrought in Valletta was so extensive that the replanning and reconstruction of its blitzed areas became unavoidable and so the opportunity was grasped for clearing the war-battered slum and wiping its hovels from the face of the city. In this way the goal that many years of peace had failed to reach was achieved through the agency of war. Initial steps for its levelling and reconstruction on sanitary lines were taken in hand in 1948. The project consisted of four blocks of modern dwelling units centred round a square facing Marsamxett Harbour.[45]

---

[37] Galton, D., and Sutherland, J., *op. cit.*, p. 90.

[38] Sutherland, J., *Report on the Sanitary Condition of Malta and Gozo*, London, 1867, pp. 33 and 45.

[39] Ghio, A., *Report on the Disease which Appeared in the Manderaggio of Valletta in the Summer of 1879*, Malta, 1879.

[40] Critien, A., *op. cit.*, p. 40.

[41] *Report on the Health Conditions of the Maltese Islands for the Year 1937*, p. xxiv.

[42] *Malta Government Gazette*, 24th March 1937, p. 324.

[43] *Malta Government Gazette Supplement*, 7th July 1939, p. 1523.

[44] 'Report on the Establishment, Organization and Activities of the Housing Department for the Financial Year 1945–48', *Malta Government Gazette Supplement*, 14th July 1950, p. 1646.

Considerable progress has been achieved, since the end of the war, in the rebuilding and repair of houses in all blitzed areas but the supply has so far failed to keep pace with the desperate demand for homes by an ever growing population. In its efforts to improve the situation the government started negotiations in 1956 for the purchase of the 'Camerata' from the War Department[46] and launched pilot schemes for the reconditioning of substandard houses and for the erection of new independent units on single-storey dwellings; plans were also prepared for the construction of blocks of flats at Floriana, Pawla Hill and Rabat,[47] but the problem still calls for a solution.

[45] 'Report on the Working of the Public Works Department for the Financial Year 1948–49', *Malta Government Gazette Supplement*, 22nd February 1950, p. 357.

[46] *Times of Malta*, 6th October 1956, p. 3.

[47] *Times of Malta*, 5th January 1957, p. 3.

CHAPTER 37

Disposal of the Dead

In prehistoric and in Punico-Roman Malta the dead were interred in rock-cut tombs and caves.[1] Speaking of the graves of this period dug in the sides of the hills of Bingemma, the French knight Louis De Boisgelin states: 'It is impossible not to be struck by the beauty of these small tombs, the exquisite taste of their composition and the highly finished manner in which they are executed; they may, indeed, be esteemed the finest and most elegant monuments existing of so small a size.'[2] In Roman times the interment of corpses in towns was prohibited by law. There is evidence that cremation was practised in Malta but with the introduction of Christianity in A.D. 60 cremation was abandoned and replaced by the integral preservation of the corpse. The earliest extant Christian cemeteries consisted of an underground network of galleries and vaults dug in the rock. These catacombs are still to be found at a short distance from the walls of the ancient capital city Mdina.

Following the establishment of peace between the Roman State and the Christian Church suburban above-ground cemeteries came into use towards the end of the fourth century. With the spread of Christianity the custom of burying the dead in cemeteries gave place to the practice of inhumation inside the churches;[3] this usage was, in later years, expressly disallowed by Canon Law but church burial continued through the centuries down to our own times. In 1703 the Diocesan Synod of Malta confined itself to prohibiting burials 'prope altaria'.[4] Church burial was, however, prohibited during epidemics when extra-mural cemeteries were established. The earliest known go back to 1592 when, as a result of the outbreak of plague in that year, special graveyards were prepared in the open countryside for its numerous victims. This practice of providing special cemeteries during epidemics was followed in the plague of 1675–76 and of 1813, in the smallpox of 1830 and in the cholera of 1837, 1865 and 1887.[5] An early extra-mural burial ground was set up at the Marsa since before 1675 for Turkish slaves dying in captivity in Malta.[6]

---

[1] Bellanti, P., *Studies in Maltese History*, Malta, 1924, p. 52.

[2] De Boisgelin, L., *Ancient and Modern Malta*, London, 1805, vol. i, p. 45.

[3] Caruana, A. A., *Ancient Pagan Tombs and Christian Cemeteries in the Islands of Malta*, Malta, 1898, p. 127 and *passim*.

[4] Debono, P., *Sommario della storia della legislazione in Malta*, Malta, 1897, p. 206.

[5] Vella, E. B., *Ha˙-Żabbar bil Ġrajja Tieghu*, Malta, 1926, p. 94.

[6] Archives 484, fol. 267t, Royal Malta Library.

Valletta possessed a cemetery for those who died in the Holy Infirmary.[7] It was situated across the street facing the main portal of the hospital and adjoining the Women's Hospital. This cemetery seems to have fallen into disuse by 1848 when the Società Medica d'Incoraggiamento drew the attention of government to the need for preventing the bones from coming into contact with the water and air as it was feared, according to current medical thought, that the exhalations arising from them might infect the air with consequent harmful effects on the public health.[8] The cemetery was subsequently broken up and the bones were collected and deposited in a subterranean chapel on the same site. Some time later a chaplain of the Civil Hospital was struck with the idea of sorting out the bones and decorating the walls of the crypt in all sorts of fantastic architectural designs whence the chapel became known as the Chapel of Bones.[9] This chapel was destroyed by air bombardment during the Second World War.

The first attempt to prohibit burials in towns in non-epidemic times was made in 1776, when no more space was available for burials in the cemetery attached to the Holy Infirmary. The General Chapter of the Order, realising the need for the provision of another graveyard and fearing the outbreak of some epidemic by 'infected air' arising from the Infirmary cemetery, proposed to the Treasury the establishment of an adequate burial place outside the city of Valletta.[10] In 1777 the government directed the Jurats of the municipality of Valletta to build a cemetery on Kordin Hill with a view to preventing the burying of corpses in the town. The idea was proposed by the Grandmaster and approved by the Council of the Order but the 'ambition of a few, the cupidity of others, the ignorance and prejudices of many' opposed this salutary reform and the project had to be abandoned after prolonged deliberations.[11] Another site for the cemetery was eventually chosen outside Valletta facing the bay of Msida in the vicinity of the counterguard of Salvatore Bastion. It was ready for use in April 1778.[12] Originally it was named the Cemetery of the Holy Infirmary but during the nineteenth century it was used for the interment of British residents and became known as the old Protestant Cemetery of 'Ta Braxia'.[13]

The question of burials and its bearing on public health again came to the fore in 1780 when the church of St. Dominic at Valletta was extensively damaged by an earthquake and its demolition was being discussed. Its reconstruction entailed the digging up of the centuries-old graves inside the church for the laying of the foundations of the new edifice. The Maltese Medical College and the Health Office warned the Grandmaster that the exhumation of the corpses constituted a danger to the public health and that the graves had better be left undisturbed lest the atmosphere became infected, with dire consequences to the well-being of the community. The Council was prepared to abide by these recommendations but they deemed it advisable to obtain the opinion of an eminent continental authority on the matter. Through the Order's ambassador in France, therefore, a series of questions was submitted to the Royal Society of Medicine of Paris. This Society appointed a commission of eight of its members to study the various queries submitted by the Order's ambassador and to draw up a report upon them. This report was read at a meeting of the Society held on the 5th December 1780 and subsequently published over the name of its Permanent Secretary, Vicq d'Azyr.[14] The French authorities upheld the decision of the Maltese Medical College and, among other things, recommended that church burial should be abolished and the dead be buried in cemeteries outside the towns; however, in spite of these wise counsels, when a public cemetery was laid out in 1788 it was constructed beneath the church of St. Publius at Floriana.[15] Better counsels prevailed in 1784 when a site for the erection of a Jewish burial ground was granted in Rinella Creek.[16]

---

[7] Archives 142, fol. 323 (vol. 6), Royal Malta Library.

[8] *Storia della Società Medica d'Incoraggiamento di Malta*, Malta, 1845, p. 201.

[9] Cooke, M., 'A Modern Golgotha', *Mediterranean Naturalist*, Malta, 1893, p. 401.

[10] Archives 309, fol. 156t, Royal Malta Library.

[11] Debono, P., *op. cit.*, p. 206.

[12] Archives 160, fol. 14, Royal Malta Library.

[13] Darmanin Demajo, G., 'Le albergie delle lingue iberiche e le loro chiese nazionali', *Archivio Storico di Malta*, 1932, iii. 93.

Cemeteries outside every village in the Island were established by order of the National Congress of the Maltese insurgents during the 'fever' epidemic that decimated the population in 1799. Burials in parish churches were prohibited in the hope of diminishing the chances of 'air infection' and of preventing the further spread of the 'fever'.[17] The fear of contaminating the atmosphere with exhalations from corpses was one of the main features that characterised medical thought in the first half of the nineteenth century. In 1807 a request was made to the municipality of Mdina for a permit to dig up a part of the cemetery attached to the old church of Birkirkara for the recovery of some silver ware that was alleged to have been hidden in this burial ground. The municipality sought the advice of a medical board composed of the Physician-in-Chief, the senior physician of Mdina, the physician of Santo Spirito Hospital and another doctor from Birkirkara. Although no burials had taken place in this cemetery for sixty-two years, the Board deemed it wise to recommend the following precautions to prevent any possible fouling of the atmosphere with harm to the health of the inhabitants, viz., the previous excavation of a pit for the reception of the bones and earth dug up, and the purification of the air during these operations with vinegar and aromatic herbs, the entire work being carried out under the direction of a medical man.[18]

By the mid-nineteenth century the Floriana underground graveyard began to occupy the attention of the sanitary authorities. Serious inconveniences were being caused by the offensive smells emanating from the graves when these were opened for the removal of human remains to make room for fresh burials. Under these circumstances it was decided to discontinue the interment of more corpses in this cemetery and to use the open burial ground outside Floriana situated at Blata-il-Bajda on the San Guiseppe Road.[19] This cemetery, built in 1785,[20] had been allowed to 'become a heath, covered with a heap of rubbish, thorns and nettlebushes . . . a common field laid waste without even a central cross or chapel as prescribed by the ritual of the Catholic Church'. This desolate scene did not, naturally, encourage the people to take to the idea of extra-mural burials. In 1859 on the recommendation of the Comptroller of Charitable Institutions, who hoped that 'a taste may be gently introduced for extra-mural burials among the better classes of this population', the grounds were re-laid and extended and a colonnade was built round it.[21]

---

[14] *Rapport sur plusieurs questions*, Malta, 1781. Vivenzio, G., *Risposta a molte quistioni proposte alla Società Regale di Medicina di Parigi*, Napoli, 1781.

[15] Ferres, A., *Memorie dell'Inclito Ordine Gerosolimitano*, Malta, 1881, p. 222.

[16] Manuscript 429, Bandi 1780–84, fol. 27, Royal Malta Library.

[17] Azzopardi, B., *Giornale della presa di Malta e Gozo*, Malta, 1864, p. 127.

[18] Manuscript 183 Università, fol. 176, Royal Malta Library.

During the smallpox scare of December 1853 plans were prepared for the formation of two cemeteries—one outside St. Margherita Gate and another at Kordin—to serve for the cities of Senglea, Bormla and Birgu.[22] By 1863 the government contemplated the laying out of a new cemetery on a sufficiently large scale at some distance from Valletta. A site near Pawla was selected. The project was welcomed by the more enlightened members of the public but some opposition was encountered from interested parties connected with the churches[23] and from that section of the population who still favoured church burial—a usage that by that time had been abandoned by most civilised countries.[24] The Government was, however, determined to push on with its project and in 1869 Ordinance No. II authorised the Head of the Government to disallow interments within the towns of Valletta, Birgu, Senglea, Bormla and Floriana. An exception was made for the Archbishop of Malta, the parish priests and claustral nuns. This law was put into effect in March 1872 when the new cemetery was completed.[25] This innovation was accepted by the people with great reluctance and only after the press began educating the public in matters of hygiene—a campaign that was very much needed as all classes of the population were indifferent to the importance of sanitary measures.[26] The first burial was that of a female beggar from Naxxar who died at the Central Hospital on the 22nd January 1872.[27]

---

[19] Letters Issued from 16th April 1847 to 30th December 1853, letter dated 23rd August 1848, Medical & Health Archives, Valletta.

[20] Charitable Institutions, Book No. 29, fol. 195, Medical & Health Archives, Valletta.

[21] Letters to Government from 7th January 1859 to 31st December 1861, fol. 25, Medical & Health Archives, Valletta.

[22] Inspector's Letters to Government from 31st August 1850 to 13th October 1857, fol. 134, Medical & Health Archives, Valletta.

[23] Segond, G., *Storia ta Malta u Ghaudex*, Malta, 1930, vol. v, p. 468.

[24] *L'Arte*, 22nd December 1864, p. 1.

[25] Debono, P., *op. cit.*, p. 207.

[26] *Il Barth*, 9th March 1872, p. 127; 6th March 1875, p. 495.

[27] Segond, G., *op. cit.*, vol. v, p. 476.

The question was raised in 1872 as to whether the corpses of persons dying from 'contagious' diseases were to be allowed to be taken to church for the funeral service. The medical profession favoured a law prohibiting church services in such cases although they were prepared to compromise and to tolerate the holding of church services in the case of persons whose death was not due to a zymotic illness with the proviso, however, that even this concession was to be withdrawn during the summer between the months of June and September.[28] Another matter that formed an important topic of discussion concerned the possibility of the interment of living persons under the impression that they were dead. This problem had already engaged the attention of the authorities of the Holy Infirmary in the previous century. In fact the corpses of patients dying at the Infirmary were kept under observation with their faces uncovered by day and by night with a view to giving prompt aid in case the cadaver showed any signs of life.[29] It appears that this precaution was no longer adhered to in the nineteenth century; on the contrary it had become the common practice to enclose the corpse in the coffin and nail the lid before six hours had elapsed from the death of the deceased. Appropriate legislation put a stop to this usage by disallowing the burial of corpses before the passage of twenty-four hours after apparent death.[30] This meant, in practice, the retention of the corpse at home for twenty-four hours. A fresh difficulty then arose. Housing conditions, especially among the poorer section of the population, were far from being adequate for this purpose. The presence of a dead body for the length of time contemplated by the law in an underground cellar or in the crowded room of an over-populated tenement house was not considered to be free from danger to the health of neighbours and of the public especially if the individual had died from an infectious illness or in the course of an epidemic. The need for the provision of mortuary rooms for the reception of dead bodies from unhygienic dwellings until the expiration of the statutory twenty-four hours made itself felt in 1875 but it was not until 1880 that mortuary chambers were made available.[31] In Floriana, the dead-house of the Central Hospital, and in Valletta, Nibbia Chapel were provided for this purpose. To save the expense of keeping a person in constant attendance on the spot to watch the corpse, an 'alarm bell apparatus' was fitted up.[32] This contrivance consisted in a number of straps fastened to the hands and feet of the corpse so that the slightest motion of the limbs set up the ringing of a bell.[33] Mortuary chambers went out of use when a mortuary was constructed at the Addolorata Cemetery for the reception of corpses awaiting burial.

Church burial was still common in the countryside until the close of the nineteenth century. The government was quite ready to suppress this practice and to provide proper cemeteries but at the same time showed reluctance to pass laws prohibiting interment in churches in the country districts because country-folk were still very much opposed to burials outside their churches; in fact it was feared that any legislative measures against this traditional usage ran the risk of being interpreted as an interference with their religious practices. Fortunately this opposition was successfully overcome through diplomatic negotiations with the Cardinal Secretary of State of the Vatican. This prelate instructed the Bishops of Malta and Gozo to assist the civil authorities in doing away with interments in churches.[34] Cemeteries were not, however, made immediately available and church-burial was not done away with in all country districts; indeed it persisted up to very recent times in a few localities.[35]

---

[28] *Il Barth*, 6th August 1872, p. 171.

[29] Archives 1714, fol. 30t, Royal Malta Library.

[30] *Il Barth*, 6th August 1872, p. 171.

[31] Casolani, C., *The Sanitary Question in Malta*, Malta, 1880, p. 17.

[32] Letters to Government from 1st July 1878 to 22nd March 1883, fol. 197, Medical & Health Archives, Valletta.

[33] Bedford, W. K. R., *Malta and the Knights Hospitallers*, London, 1894, p. 60.

---

[34] *Correspondence Respecting Sir L. Simmons' Special Mission to the Vatican Relative to Religious Questions in the Island of Malta*, London, 1890, pp. 5 and 20.

[35] *Malta Government Gazette Supplement*, 3rd August 1937, p. 26. *Times of Malta*, 23rd December 1952.

PART VI

COMMUNAL CARE AND WELFARE

CHAPTER 38

The District Medical Service

WE have already traced the existence of a salaried physician, a surgeon and an apothecary in the employment of the Municipality of Mdina to attend to its sick citizens as far back as the fifteenth century (Chapter 2). The first medical men to occupy these posts were Jews but following their expulsion from Malta in 1492 it is presumed that Christian physicians and surgeons were employed. On the 10th April 1582 Pope Gregory XIII empowered the Municipality of Mdina to impose a tax on its citizens—excluding ecclesiastics—to raise the necessary funds for the payment of its public debts and for the salaries of the schoolmaster and the physician.[1] In 1539 there had been two physicians and a barber-surgeon for blood-letting in the employment of the Municipality.[2]

In the eighteenth century arrangements were made for the provision of a domiciliary medical service for poor sick women, living in the towns of Valletta, Birgu, Senglea and Bormla, who could not be admitted to the Women's Hospital. The earliest reference to the establishment of this service is that contained in the regulations published in 1725.[3] The running of this service was entrusted to two Commissioners of the Sick Poor who were two professed knights of different nationalities nominated by the Grandmaster. As the division between the practice of the medical and the surgical arts still existed then, five physicians and five surgeons were appointed. Two physicians and two surgeons were posted in Valletta while Birgu, Senglea and Bormla had each a physician and a surgeon. These medical men were paid by the government and were obliged to render free treatment to needy women except prostitutes who were compelled, when sick, to go to the Women's Hospital. In prescribing free medicines and recommending financial relief the doctor declared in the relative ticket the name and surname, street and town of the patient for the information of the Commissioners who examined and signed the doctor's application before the patient obtained the medicines or money allowance or the food subsidy suggested by the physician.

The Commissioners had to see that the physicians and the surgeons visited the sick daily and that they performed their duties properly and that the patients actually received the money and the food allotted to them. Relief to the sick was distributed by eight elderly women, two for each town, called '*pitanziere*' (or pittance-giver). It was the duty of these women to accompany the Commissioners whenever these found it necessary to visit the homes of the sick to make sure that the patients were being adequately looked after and that they were receiving the allowances issued to them. The '*pitanziere*', later known also as Dispensers, still formed part of the alms-giving section of the Charitable Institutions in 1839.[4]

---

[1] Mifsud, A., 'Papi, fortificazioni e tasse', *Archivum Melitense*, 1919, iii. 417.

[2] Zammit, T., 'The Medical School of Malta', *Proceedings of the Royal Society of Medicine*, 1920, xiii. 133.

[3] *Notizia della Sacra Infermeria*, Rome, 1725.

Financial aid, food and medical relief were also given to the poor blind, the lame, the leprous and the scrofulous. Soup was distributed, morning and evening, from the Infirmary to the beggars and invalids while bandages, crutches, sticks, linen and used blankets were given free to the needy.

The first Physicians for the Poor under British rule were the Principal Physicians of the Civil Hospital, their appointment as such being issued on the 26th October 1801. They were to pay domiciliary visits to poor sick women living in Valletta.[5] In later years the Physicians of the Poor were incorporated with the Executive Police and they became known as Police Physicians. In 1837 they were attached to the Department of the Charitable Institutions. Some of them were given other work besides that connected with their duties as Police Physicians; thus the surgeon of Senglea was also the surgeon of the Foundling Hospital while the physician of Floriana was also the medical officer in charge of the Ospizio and of the House of Industry. They were also expected to have an extensive knowledge not only of public health but likewise of forensic and of veterinary medicine.[6]

The first Public or Government Dispensary or '*Farmacia dei poveri*' was opened in Valletta on the 14th April 1832[7] with the object of restricting admissions into the Civil Hospital at a time when increased demands were being made on the hospital owing to the bad economic conditions prevailing in the Island. Distress was so rife in Malta that it affected not only the poor but also reduced many of the middle class to seeking relief from the public charities. The idea of establishing a Public Dispensary was mooted in December 1831 by Dr. John Davy who had been impressed by the usefulness of such institutions in England and who, at the time, was in Malta as Inspector General of Army Hospitals (1824–1835). His offer to make over to the new dispensary sundry surplus utensils from the General Pharmacy of the army was gladly accepted by the Permanent Committee.[8]

---

[4] Letter Book from 2nd January 1838 to 28th April 1842, fol. 15. Minute Book from 13th September 1837 to 27th June 1843, fol. 150, Medical & Health Archives, Valletta.

[5] Registro Decreti Lettere, fol. 13, Medical & Health Archives, Valletta.

[6] *L'Avvenire*, 29th December 1849, p. 35.

[7] *Malta Government Gazette*, 11th April 1832, p. 112.

[8] Resolutions of the Permanent Committee from 3rd March 1831 to 23rd June 1831, fol. 54, Medical & Health Archives, Valletta.

The dispensary was staffed by a paid apothecary and by two physicians and two surgeons who offered their services gratis.[9] By 1833 a total of 22,000 persons had been seen and assisted at the dispensary. The Permanent Committee of the Charitable Institutions, in commenting upon the great utility of the new venture in relieving the pressure of admissions into the Civil Hospital, remarked that the success was mainly due to the exertions of the Medical Officers who were henceforth to be granted a small gratuity by way of appreciation of their work.[10]

The first Valletta Dispensary was housed at 228 Merchant Street i.e. the Auberge d'Italie.[11] In September 1839 it was transferred to a room in the Civil Hospital for 'proper surveillance' by the officers of the Charitable Institutions.[12] Contemporary documents refer to it as the '*albergo dei poveri*' whence the Maltese derivation of '*il berġa*' by which appellation all government dispensaries are known to this day.[13]

Dispensaries were subsequently established in various towns and villages, the dispensary being attached to the Police Station. The extent of medical assistance tendered to the inhabitants was so considerable that by 1849 the population of the Civil Hospital fell by one-half.[14] The dispensaries were run by twenty-one physicians who at this period were known as Medical Dispensers or, simply, Dispensers.

On the 1st January 1859 the office of Chief Police Physician and Inspector of Dispensaries was established[15] and the Dispensers again reverted to the Police Department forming the branch of the Medical Police. Their duties were of three kinds—clinical, administrative and sanitary. The former included attendance at the dispensaries on specified days and hours to relieve, free of charge, by advice and treatment the sick and destitute who presented themselves. For this purpose the physician was provided with the necessary medicaments for the proper custody of which he was held responsible. He was also to assist at their homes, at the request of the Parish Priest or the Syndic, those sick poor who were unable to go to the dispensary. Patients needing hospital treatment were sent by him to the appropriate institution with a written statement about the case. It was incumbent on him to afford his professional help in cases of accident irrespective of the financial condition of the injured person; to assist women in difficult cases of labour; to exert himself to promote vaccination and to vaccinate the children of the poor before they attained the age of one year; to issue permits for burials; to take part in all necropsies in cases of deaths occurring under suspicious circumstances; to give certificates to paupers for admission into the Poor House and for outdoor relief.

---

[9] *Malta Government Gazette*, 15th December 1832, p. 52.

[10] Charitable Institutions Book No. 29, fols. 147, 159, 169, 225 and 325, Medical & Health Archives, Valletta.

[11] *Malta Government Gazette*, 11th April 1832, p. 112.

[12] Minute Book from 13th September 1837 to 27th June 1843, fol. 147, Medical & Health Archives, Valletta.

[13] *Il Filocamo*, 1st May 1841, p. 35; of 16th December 1841, p. 140. Letter Book from 9th September 1837 to 16th April 1847, fol. 124, Medical & Health Archives, Valletta.

[14] Commissioners of Charity Inspector's Letter Book from 6th May 1851 to 3rd October 1855, fol. 323. Letters to Government from 9th June 1849 to 26th August 1850, fol. 29, Medical & Health Archives, Valletta.

[15] *Malta Government Gazette*, 28th January 1859, p. 28.

Administrative work consisted in the keeping of registers recording the treatment prescribed, the names and particulars of patients sent to hospital, of children vaccinated, and of persons born and dying in his district.

As a Sanitary Officer he examined, at the request of the Police, articles of food exposed for sale and decided as to their wholesomeness. He was also responsible for sending a weekly return to head office on the state of health of the area under his charge specifying whether his district was free from illness of an epidemic nature and reporting the kinds of diseases that prevailed there. In addition he was expected to forward an immediate notice of any extraordinary case which came under his observation;[16] and also to watch over the execution of all laws relating to public hygiene.

Sir Penrose Julyan, in his report of the 25th March 1879, suggested the reduction of the number of Police Physicians from twenty-eight to sixteen and a change in their designation to that of City or District Medical Officers. He also recommended that as the Superintendent of Police had nothing to do with the control of the establishment of the Police Physicians, he should be relieved of its nominal custody and that they should revert to the Department of Charitable Institutions for all administrative purposes. Ordinance No. VIII of 1885 abolished the posts of Chief Police Physician and of Police Physicians. Those of Chief Government Medical Officer and District Medical Officers were created but the District Medical Officer continued to function also as Sanitary Officer under the Comptroller of Charitable Institutions. His connection with the police was not severed completely in order to enable the police to secure his services when necessary. To all these duties was added the inspection of the slaughter-houses in his district and of the meat. For this purpose he was provided with a copy of Fleming's *Manual of Veterinary Sanitary Science and Police*. The District Medical Officer of Tarxien was appointed *ex officio* the medical attendant of Kordin Prison.[17] Detailed *Regulations for District Medical Officers and Instructions for the Management of the Government Dispensaries* were published in the same year.[18]

A survey of the public dispensaries made by the Comptroller of Charitable Institutions on their transfer to his department revealed a sorry state of affairs. None of the books had been kept in order so that it was found necessary to undertake the laborious task of weighing and measuring all the medicines and counting all the instruments before inventories could be drawn up. Many of the medicines had to be discarded as they had become unfit for use while many of the instruments had become unserviceable 'evidently from neglect'. Many of the rooms fitted as dispensaries were unsuitable for this purpose either because they were too small or too damp. In the words of the Comptroller the state of the greater part of the dispensaries was 'disreputable'. Measures were, therefore, taken in hand to remedy these defects and a copy of the *British Pharmacopœia* was supplied to every District Medical Officer to standardise the prescriptions of medicines.[19]

---

[16] *Instructions for the Guidance of the Government Dispensers*, Malta, 1851.

[17] Letters to Government of 23rd March 1883 to 20th April 1888, fols. 311, 314 and 403, Medical & Health Archives, Valletta.

[18] *Malta Government Gazette Supplement*, 21st September 1885, pp. 341–343.

The District Medical Service enjoyed no administrative peace. When, in 1895, the Public Health Department was re-established the District Medical Service was placed under its control. This arrangement ceased in 1897, the District Medical Officers reverting to the Comptroller of the Charitable Institutions, to be re-transferred to the Public Health Department in 1900.[20]

[19] Letters to Government of 23rd March 1883 to 20th April 1888, fol. 381.

[20] Ordinance No. XIV of 1900.

CHAPTER 39

Child Welfare

PROTECTION OF CHILD LIFE

The protection of child life by the State and by the Church in Malta is coeval with the existence of the earliest medical institutions in the Island. It has already been shown how the Hospital of Santo Spirito at Rabat received unwanted babies and catered for their upbringing and well-being (Chapter 3). Identical provisions—including the '*ruota*' or cradle—were available at the Holy Infirmary, first at Birgu and subsequently at Valletta, where rooms were reserved for the reception of exposed babies or foundlings, orphaned infants and the children of destitute parents. This solicitude shown by the State in Malta contrasts markedly with the indifference for infant life that prevailed in other countries until the eighteenth century.

It appears that towards the close of the sixteenth century the hospitality of the institutions above mentioned was being abused in Malta by parents who, though possessing enough means for rearing their babies themselves, chose to deposit them in these asylums as if they were foundlings. The ecclesiastical authorities took such a serious view of this abuse that in an effort to stamp it out, it was declared a 'reserved sin' by Bishop Tommaso Gargallo in 1591.[1] Originally there were two 'honest women' —known as '*ospitaliere*'—who resided in the Infirmary and whose duty was to see that the babies were properly nourished and looked after. By 1642 they were no longer quartered in the hospital but had been substituted by two other women one of whom lived in Valletta and the other in the countryside.[2] When the number of the little inmates was so great that the two wet-nurses could not cope with all their charges, the babies were nursed on goats' milk until a wet-nurse or foster-mother was found for them. Records were kept of the date of consignment of the infant to the nurse and when the baby was returned to the Infirmary and whether it was brought back dead or alive. A numbered lead pendant was hung round the infant's neck as a sign of identification to prevent the 'infinite frauds' which had crept in (1776). The list of foundlings was reviewed by the 'prud'hommes' of the Infirmary at the approach of the feast of

---

[1] Manuscript 6, fol. 34t, Royal Malta Library.

[2] Archives 6387, fol. 1, Royal Malta Library.

Saint Martin in the month of November.[3] In the case of death, the infant had to be brought for burial to the cemetery of the Infirmary to enable the hospital authorities to withdraw the numbered lead pendant.

Some babies were farmed out, these being visited by the Grand Hospitaller and the 'prud'hommes' of the Infirmary every two months. These officials kept a register in which they noted the number of babies visited, their ages and the results of their inspections.

The number of exposed children received annually at the Holy Infirmary towards the end of the eighteenth century was just over two hundred but only half of them survived by the end of the year.[4] John Howard, who visited them in 1786, has recorded his impressions of the Foundling Hospital in these words: 'At the back of the hall (the Great Ward of the Infirmary) over the Knights' arms (a cross) is a marble crown and under it on white marble is this inscription—Infantium Incolumitati. Here is a wooden cradle which, turning on an axis, the pins strike a bell to give notice of the reception of infants into the Foundling Hospital. These infants, after being received, are sent to the governess of that hospital who provides nurses for them in the country; and in the first Sunday in every month these nurses bring back the children to shew them and at the same time to receive their pay; the governess very properly being present. On one of these occasions I had the pleasure of seeing a number of fine healthy children . . . In the Foundling Hospital there were thirty-nine girls from seven to about twelve years of age who were clean both in their persons and dress but very pale. They have no proper place for exercise and but two bedrooms one of which is close and offensive. A piece of ground, which might contribute to their health by being made a playground, is a sort of useless garden.'[5]

Provision for the future welfare and education of the foundlings was made by the General Chapter of the Order held on the 21st April 1555. These arrangements underwent very little change in subsequent years. In the eighteenth century, on attaining the age of eight years, the boys were taken care of by a priest at Fort Ricasoli. They were apprenticed to artisans to learn a trade 'in accordance with their inclinations' and were granted financial help until they reached their sixteenth year.[6] They were also enrolled in the navy and the army.[7] The girls were admitted into the '*conservatorio*' when they became eight years old until at twenty years they were settled in life either in marriage or as servants in the service of respectable people or as attendants in the Women's Hospital.[8] The practice was also common of allowing people of good character to take children from the Foundling Hospital and bring them up as if they were their own and eventually adopt them. The legal instrument entered into obliged the parties to afford parental solicitude and assistance to the child and to have in return a right to the personal services of the same until the attainment of the years of majority. The foster parents were to train and educate the child in a manner as to make of him a 'good Christian member of society' and to start him into the world by providing him with the necessary means.[9] These arrangements were unaffected by the French interlude of 1798–1800 (when the number of exposed babies was five hundred) and continued into the first years of the British connection with Malta.[10]

---

[3] Archives 309, fols. 74t and 166t, Royal Malta Library.

[4] Archives 6408, no pagination, Royal Malta Library.

[5] Howard, J., *An Account of the Principal Lazarettos in Europe*, London, 1789, p. 60.

[6] Archives 309, fol. 75, Royal Malta Library.

[7] Archives 1714, fol. 38, Royal Malta Library.

[8] Archives 309, fol. 75, Royal Malta Library.

In 1804 the foundlings were transferred to an annexe of the Ospizio at Floriana which came to be known officially as the Foundling Hospital. From here the babies were farmed out to wet-nurses as fast as these could be provided for them but when nurses were not available the babies were looked after in the hospital itself being reared on goats' milk which they sucked directly from the animal. Though great care and attention were bestowed on them, mortality among them was very high in 1821.[11]

On the 1st January 1833 they were moved to the House of Industry at Floriana.[12] The '*ruota*' or 'wheel' or 'wooden cradle' was abolished in the same year as it was considered to be no longer necessary in view of the facilities afforded by the institution in receiving children upon the certificate of the Parish Priests stating that the infants were born '*ex ignotis parentibus*'. Conditions at the House of Industry were not of the best. A considerable mortality occurred among the infants. Out of a total of 597 admitted between 1833 and 1836 no less than 478 died, most of the deaths occurring within the first twelve months residence in the institution. In consequence of this high mortality, the Governor of Malta ordered a report on the state of the Foundling Hospital to be made by its managing committee. The committee submitted that 'unfortunately motives of economy have always interfered with the wishes of the committee to allot a separate nurse to each infant. The Committee have been compelled, therefore, in many instances, in consequence of their limited means, to allot to one nurse two or three infants at a time; and there have been occasions when they were obliged, from the unusual number of foundlings suddenly brought into the house and the difficulty of obtaining extra nurses at a moment's notice, to give one nurse as many as four infants to attend and suckle.'

The report was submitted to the Royal Commissioners appointed to inquire into the affairs of the Island in 1836 and their immediate reaction was to propose the abolition of the institution; however, they stopped short of this measure when they found that admission into the hospital was being abused. In fact many babies were being admitted on the pretext that they were foundlings when in reality they were legitimate offspring. The Commissioners, therefore, tried to remedy this evil by restricting reception into the hospital solely to 'children publicly exposed and deserted'.[13] The result of this measure was that, for years afterwards, unwanted babies were left in the streets or deposited inside the churches. In one single month in 1847, for instance, 'six children were laid at the foot of the great altar of St. Paul's Church' at Valletta so that 'the vestry of the parish has become an hospital'.[14] In spite of these occurrences the policy of keeping the population of the institution as low as possible was not departed from so that when the foundlings were transferred to the Orphan Asylum in 1852 their number was limited to one hundred of each sex.

---

[9] Letters to Government from 5th March 1869 to 31st January 1872, fol. 257, Medical & Health Archives, Valletta.

[10] Hardman, W., *A History of Malta*, London, 1909, p. 200.

[11] Hennen, J., *Sketches of the Medical Topography of the Mediterranean*, London, 1830, p. 484. Davy, J., *Notes and Observations on the Ionian Islands and Malta*, London, 1842, vol. ii, p. 120.

[12] Charitable Institutions, Book No. 29, fol. 184, Medical & Health Archives, Valletta.

At the Orphan Asylum their education was both 'literary' and 'industrial'. A very wise provision was the mixing and associating of the asylum's children, during school hours, with children frequenting the government primary schools. When they reached the age at which they had to leave the asylum, the Charity Commissioners took measures to provide them with means for their future careers.[15] With the promulgation of the first Criminal Code under British rule in 1854 legal provisions were made for the protection of exposed infants. Persons guilty of abandoning a child under seven years of age were punished with imprisonment up to one year: but if in consequence of such neglect the child died or suffered harm, the offender became liable to the penalties prescribed for homicide and bodily harm. The code also made it obligatory on anyone finding an abandoned baby or stray child to provide for its immediate safety and to deliver it to the police. The supervision of farmed-out children under three years of age was, in 1876, entrusted to the Police and the Police Physician who was still performing this duty at the beginning of the present century.[16]

The foundlings remained at the Orphan Asylum at Valletta until the opening of the Poor House at Mghieret in 1892 where accommodation was provided for them until they could be farmed out. Other homes for illegitimate and orphaned babies and children were founded, and are still doing very good work, by private individuals and by religious orders. Attempts are now being made to bring these institutions into line with current trends in child welfare. With this aim in view a Committee for Diocesan Orphanages was set up in September 1956 to advise the various institutes on educational and health matters and to co-ordinate their activities. Two nuns were brought from the United Kingdom to give a series of lectures on Child Care to members of religious orders who run homes for infants and children. At the same time six Maltese nuns were sent to the United Kingdom to undergo courses of studies in child care.[17]

---

[13] *Report of the Royal Commissioners Appointed to Inquire into the Affairs of the Island of Malta*, London, 1838, part I, pp. 51 and 53.

[14] *Il Mediterraneo*, 21st July 1847, p. 8.

[15] *Regulations for the Government Charitable Institutions*, Malta, 1851.

[16] *Malta Government Gazette Supplement*, 26th April 1905, p. v. *Malta Government Gazette*, 21st June 1876, p. 164.

INFANT MORTALITY

The conditions under which babies were born and reared in the nineteenth century have been recorded by very few writers but enough is known to enable us to form a general idea of how they fared in those days. A visitor to Malta in 1800 was struck by the gracefulness of the 'upright carriage' of the inhabitants which he ascribed to the peculiar manner in which new-born babies were swathed. In fact no sooner was a child born, he said, 'than it is placed between two pieces of board, which reach from the feet to the neck and are attached to the body of the infant with rollers of linen but in such a manner as not to produce pain or impede the circulation. In this manner the Maltese children are universally treated till they are able to walk and thus they acquire that erect gait which never forsakes them.'[18] In 1811 a foreign resident published a pamphlet to advise Maltese mothers on the upbringing of their babies. He took them to task for swaddling their infants, for the abusive administration of medicines to babies and for the use of rocking cradles which, in his opinion, could cause 'temporary stupidity'. He emphasised the superiority of breast feeding over other kinds of food and strongly advocated the vaccination of babies against smallpox. He also described, and condemned, a curious custom, then common among country folk, who with the idea of promoting the sucking of the milk by the baby used to suspend him in air by placing a thumb under the palate.[19]

In those days marriage was an early affair, instances of girls becoming mothers at thirteen years not being very rare in the first two decades of the century. The decline of cotton spinning and weaving was one of the factors that favoured early marriages since in the absence of other employment for girls, parents strove to settle their daughters into marriage as soon as possible. In 1837 there were husbands of fifteen years of age while mothers under twenty, with four or five children, were not uncommon.[20] Twins were common but triplets were so rare that not one instance had been heard of by medical men for at least thirty years previous to 1821. Mothers left their beds on the third day after childbirth. Babies were generally breast fed but among country people infants were also fed on goats' milk and taught to draw the milk directly from the udders of the goat. How motherly these animals were with their human charges is shown from the following account: 'They leave their pasture when they think the child requires a suck, bleat at the door until admitted, scamper to the nursery where the little urchin is placed on a pillow on the floor, the goat lies down beside it, a tit is placed in its mouth, and when it sucks its fill or when Nanny is of opinion it has had enough, she rises, goes through her gambols then bounds off to feed.'[21] There were families where the same goat had suckled five or six children. The milk of the mare and she-ass was also recommended for artificial feeding.[22]

---

[17] *Times of Malta*, 29th July 1958, p. 9. *Report of the Department of Emigration, Labour and Social Welfare for the Year 1958*, Malta, 1960, p. 30.

[18] Anderson, A., *A Journal of the Forces*, London, 1802, p. 181.

[19] Anonymous, *Osservazioni sul modo di allevare i bambini in Malta fatte da uno straniero*, Malta, 1811.

[20] Ross, J., *Memoirs and Correspondence of Mrs. John Taylor, Mrs. Sarah Austin and Lady Duff Gordon*, London, 1888, vol. i, p. 105.

Hardly any attention was paid to the items of food given to infants so that they could be seen when 'scarcely dismissed from the breast, swallowing vegetables, oil, cheese and salt-fish with as much relish as their parents'. They were swathed from their shoulders to their toes, the arms being laid along the sides and included in the bandage so as to present a very striking resemblance to an Egyptian mummy; yet, notwithstanding this restraint, a crippled Maltese child was a rare sight while British doctors remarked on the strength and well-shaped bodies of these infants; they were also impressed by the activity of children especially as swimmers and divers.[23] Other observers were impressed by the rarity of rickets.[24]

A series of articles which appeared in 1843 in one of the popular journals of Malta endeavoured to combat the ignorant practices then prevailing and to inculcate wise principles regarding breast and artificial feeding, toilet training of the baby and other aspects of infant life. The counsels given are strikingly modern in their freshness and soundness and they were certainly needed by the mothers of that period for many of their babies died before reaching their fifth year of life.[25] This mortality must be viewed against the background of the adverse social and economic conditions that prevailed in Malta at the time. The decline of trade in general, and of the cotton industry in particular that followed the establishment of peace in the Mediterranean in 1814, brought in its train a long period of distress in these Islands. As work fell off the labouring classes were reduced to a state of dire poverty. Employment for men in the countryside was available only for seven months during the year while their wages hardly served to meet their daily needs in spite of their frugality. The family of a field labourer, consisting of five children, got about fifty 'scudi' or £5 a year while the average income of a government employee (of whom there were only 652 in 1836) was £42 a year. Little or nothing was spent on the education of children, since they scarcely received any, while the expense of clothing and food for them was so small that it formed an insignificant part of the family budget.

---

[21] MacGill, T., *A Handbook or Guide for Strangers Visiting Malta*, Malta, 1839, p. 14.

[22] *Repertorio di conoscenze utili*, 23rd September 1843, p. 127.

[23] Hennen, J., *op. cit.*, p. 482.

[24] MacGill, T., *op. cit.*, p. 37.

[25] *Repertorio . . .*, p. 127.

Children were put to work in the spinning of cotton at one penny per day but at night they were given neither beds nor coverings and most of them slept on a little straw with their clothes on. It was impossible to save any money for hard times and when no work was to be had the unemployed went begging or else were driven to thieving especially from the fields. Many deaths were ascribed to people feeding themselves on herbs and roots not 'fit for cattle'. It was estimated that in 1836 the number of beggars in the villages of Malta and Gozo was about two thousand five hundred excluding the children who all made 'a practice of begging'. They managed to live on the alms given by the tenants of lands, shopkeepers and ecclesiastical bodies especially the Capuchin friars.[26]

In 1851 the death rate among the general population was 21 per thousand a year in the towns and 28 per thousand in the countryside; almost 57 per cent of this mortality was among infants and children under five years of age—a rate which far exceeded that prevailing in England at the time.[27] This high mortality was due to bowel disorders but, although by 1865 it was fully recognised that these disorders were the result of want of care among parents of the poorer classes, the blame was commonly put on 'teething troubles'.[28] This notion persisted into the present century not only among the populace but also among medical men for some of whom it provided a convenient though unfounded diagnostic label.[29] In 1874 more than half of the total amount of deaths was still contributed by the mortality of infants under five years of age. That this high death rate depended, up to a certain extent, on the high birth rate (38 per thousand of the population) was fully realised but it was also appreciated that the greater part of infants were being destroyed by preventable diseases. Indeed the Chief Police Physician, Dr. A. Ghio, declared that 'the deaths of infants . . . would not be so exhorbitant if these infants were properly taken care of during their illness . . . Enteritis is the disease prevailing in these Islands particularly among children during teething and in the hot season. It is a serious disease which requires the greatest care in its management especially with respect to diet.' These children usually belonged to very poor parents who only sought medical assistance in the last stage of illness when the case had become hopeless; but infants belonging to people in easy circumstances also died from bowel disorders and in these cases death was attributed to artificial feeding.[30]

In 1884 a booklet was written and published by Dr. Fabrizio Borg on the responsibilities of motherhood and infant care. He gave instructions

[26] *Report of the Royal Commissioners . . .*, part III, pp. 8–12.

[27] Galton, D., and Sutherland, J., *Report of the Barrack and Hospital Improvement Commission on the Sanitary Condition and Improvement of the Mediterranean Stations*, London, 1863, p. 87.

[28] Ghio, A., *The Cholera in Malta and Gozo in the Year 1865*, Malta, 1867, p. 6.

[29] Busuttil, R., *Della necessità dell'istruzione pediatrica*, Malta, 1906, p. 7.

[30] Ghio, A., *Report on the Mortality in Malta and Gozo for the year 1874*, Malta, 1875, pp. 1, 18, 20 and 21.

regarding breast-feeding, weaning and hygiene. He also warned mothers about the serious dangers arising from the habit—then common—of administering infusion of poppy to babies at night to ensure an undisturbed sleep.[31] Another pamphlet, also in Maltese, was issued at this period from the Government Printing Press aiming at teaching parents how to combat the fatal diseases of childhood among which enteritis, measles and diphtheria were the worst killers;[32] but, in spite of these pioneering attempts in health education, no progress had been achieved in reducing infantile mortality by the end of the century when it still stood at 267 per thousand births.[33]

Official concern about the 'excessive' infant death rate was expressed at the beginning of the present century,[34] the first two decades of which saw the development of an increased interest in infant welfare and the establishment of the 'Pro Infantia' movement and of 'The Mothers and Infants Health Association' which by advocating and spreading the teaching of mothercraft helped to save many infant lives.[35] The question of establishing an association for the protection of infant health was first mooted in 1876 when the General Secretary of the 'Société Protectrice de l'Enfance' of Paris wrote to Dr. G. Gulia, the editor of the medical journal *Il Barth*, to enquire whether a similar association existed in Malta. Dr. Gulia replied that none existed and that he feared that no such association would ever be formed. Later developments, however, did not justify this pessimistic view but what might have made Dr. Gulia so despondent was the fact that the same issue of the journal was announcing the setting up of the Malta Society for the Prevention of Cruelty to Animals and publishing in full its regulations[36] when no one had yet thought of forming a society for the protection of infant health.

The 'Pro Infantia' association was founded some time before 1905 with the object of spreading practical hygienic measures to reduce the infant death rate that prevailed at the time. So-called 'Well Baby Clinics', on the pattern of those set up in Paris by Prof. Budin, were held weekly at Floriana and mothers were encouraged to attend them for medical advice and examination of their babies.[37] The work of the 'Pro Infantia' was also carried out by 'The Mothers and Infants Health Association' which was founded in February 1919 under the auspices of Lord Methuen, the Governor of Malta, and his wife. The first Baby Clinic was opened at Hamrun in July of the same year. Other centres were started at Valletta, Cottonera and Zejtun, the weekly consultations being held in Government

[31] Borg, F., *Kelmtejn fuq is-sahha tal ulied*, Malta, 1884.

[32] Anonymous, *Fuq il mard tat-tfal u kif nilqulu*, Malta, 1885.

[33] Maunsell, T., *Letter to the Chief Staff Officer*, Malta, 1897.

[34] *Malta Government Gazette Supplement*, 24th August 1906, p. 3. *Malta Government Gazette*, 15th November 1906, p. 1036. Critien, A., 'The Infant Mortality in the Maltese Islands', *Public Health*, 1909, xxii. 330.

[35] Critien, A., 'Local Infantile Mortality', *Times of Malta*, 30th March 1955, p. 9.

[36] *Il Barth*, 13th June 1876, pp. 115 and 123.

[37] Critien, A., 'Local Infantile Mortality' . . ., p. 9.

Elementary Schools. When, during the Second World War, the schools were blitzed the clinics continued to be held in private and temporary premises.[38] The efforts of these voluntary bodies were emulated years afterwards by the government when a scheme for the establishment of ante-natal and post-natal clinics was prepared early in 1932. These clinics intended primarily for mothers of the poorer classes, were meant (a) to ensure the medical supervision of babies and nursing mothers especially with regard to the nutritional disorders of children caused by dietetic errors and to the conservation of breast feeding; (b) to teach mothers how to care for their babies; and (c) to give domestic and hygienic advice.[39] However, it was not until the beginning of 1946 that Infant Welfare Clinics were opened by the government. The response on the part of the public was very encouraging and by the end of the year twenty-one clinics were in operation in various localities of Malta. The aim of these clinics was, in particular, to impress upon mothers the importance of proper hygiene and to teach them the principles of dietetics.[40]

In 1953 a branch of the 'Save the Children Fund' was inaugurated in Malta under the auspices of the International Union of Child Welfare. Financial aid was provided by the parent body in Britain.[41] With the aim of reducing mortality and morbidity among children, the Branch's first step was the opening of pre-natal clinics in various parts of Malta and Gozo and the provision of facilities for free ante-natal advice and care and for the examination of expectant mothers. The new Organisation strove to bridge the gap left by earlier efforts to set up pre-natal clinics against which popular ignorance and prejudice had proved to be very strong obstacles.[42] During 1953–54 over one thousand registrations were recorded and over 4,700 examinations were made. By the end of 1955 eight clinics were in operation but it soon became clear that many more were required to meet the needs of the country. As, however, it was found impossible for a voluntary organisation to undertake such an expanded programme of work, the government stepped in and decided to take over and run the clinics set up by the Save the Children Fund from April 1956.[43]

Thanks to these efforts and to the advances in the preventive and curative aspects of medicine the infant mortality rate has been decreasing steadily during the last twenty years and is no longer the 'most disappointing feature in the health chronicles of these Islands'.[44] In fact while it was still one of the highest in the world at 224 per thousand births in 1938, by 1955 it had declined to 44·9 per thousand, thus reaching a level that bears favourable comparison with that of other continental countries although it had not yet attained the levels of such advanced countries as England, the United States of America and Scandinavia where the rate was in the vicinity of 20 per thousand.[45]

---

[38] Critien, A., 'Local Infantile Mortality' . . ., p. 9.

[39] *Report on the Health of the Maltese Islands during 1932*, p. lx.

[40] *Report on the Health Conditions of the Maltese Islands for the year 1946*, p. xiv.

[41] *Times of Malta*, 4th February 1953, p. 3; 22nd April 1953, p. 6; 3rd October 1953, p. 4.

[42] Cassar, G. C., 'Child Welfare in Malta', *Times of Malta*, 17th February 1953, p. 12.

[43] *Times of Malta*, 17th August 1954, p. 10; 25th November 1955, p. 4.

[44] *Report on the Public Health Department for 1923*, p. 2.

CHILDREN'S HOSPITALS

The idea of erecting a hospital for the exclusive use of sick children goes back to the closing decades of the nineteenth century when Dr. Luigi Curmi Schinas proposed the creation of a Paediatric and also of an Orthopaedic Hospital for crippled children. It was intended to entrust the nursing of the patients to the Ursuline nuns[46] but unfortunately no headway was made. A similar suggestion was put forward independently by Dr. G. F. Inglott[47] and by Dr. (later Professor) R. Busuttil in 1906. Dr. Busuttil, besides pressing for the establishment of a children's hospital, also advocated the foundation of a Chair of Paediatrics in our University;[48] but fifteen years had to elapse before sick children were provided with their own hospital.

At the end of the First World War an appeal for funds for the erection of a Malta War Memorial in remembrance of those who fell fighting during the war was issued on the 15th November 1918. The response was enthusiastic and at a general meeting of subscribers held in 1921 it was decided that the memorial should take the shape of a Children's Hospital for the free treatment of the children of the poor. In this manner the first hospital devoted entirely and exclusively to sick children came into being. When it was opened on the 1st August 1922 it consisted of twenty cots—ten for medical and ten for surgical cases—housed on the upper floor of the Zammit-Clapp Hospital. The building was enlarged in 1929–30 to increase the accommodation to fifty-six cots and an out-patient block, meant principally for the examination and treatment of children suffering from leishmaniasis, was added in December 1933.[49] The Sisters of the Little Company of Mary have been nursing the patients since the foundation of the hospital which is maintained by private endowments, a government subsidy and donations from various sources. In October 1958 a Unit of Paediatric Cardiology was set up for the investigation of cases of congenital heart disease.[50]

---

[45] Cachia, E., 'The Infant in the Home', *A Survey of Child Welfare Problems in Malta*, Malta, 1956, p. 35. *Report on the Health Conditions of the Maltese Islands for the year 1955*, pp. 18 and 50.

[46] Formosa, I. C., *Pro Infantia, Instituzioni ortopediche e pediatriche*, Malta, 1906.

[47] Inglott, G. F., 'Pro Infantia', *Malta Letteraria*, 1906, no. 26, 161.

[48] Busuttil, R., *Della necessità dell'istruzione pediatrica*, Malta, 1906.

[49] *The Malta War Memorial Hospital for Children. Report for the year ending 31st July 1929. The Malta War Memorial Hospital for Children*, Malta, 1933, p. 6.

[50] *Circular from The Malta War Memorial Hospital for Children dated 20th October 1958.*

At St. Luke's Hospital separate accommodation for children was provided in February 1948 when a Children's Ward was opened for medical cases. Boys and girls under five years of age were previously nursed and treated in the Women's Division. Although in 1953 the child population of St. Luke's Hospital formed nearly one-third of the total hospital population, the government was not in a position to establish a separate hospital for children on account of the heavy expenditure involved.[51] Children in need of specialist surgical intervention, such as heart surgery, are sent to the United Kingdom for the necessary treatment. The first Maltese 'blue boy' to benefit from this arrangement was operated on at Hammersmith Hospital on the 3rd October 1951.[52]

THE SCHOOL CHILD

Primary schools were first set up by the government in 1836. Progress was very slow so that only 12,000 children were on the school rolls by 1898 out of a population of 37,000 children of school age.[53] Indeed it was only after the granting of self-government to the Island in 1921 that the drive for elementary education gained momentum. By 1930 the number of government schools was sixty-one with over 26,000 pupils while by 1946–47 there were one hundred and fourteen schools with over 45,000 scholars.[54]

A School Medical Service was established in 1929 when the children in the primary schools numbered 24,000 but until 1943 the staff consisted only of one whole-time and one part-time medical officer.[55] In 1947 the School Medical Service was separated from the Education Department and incorporated with the Medical and Health Department. Since then it has expanded, the staff comprising—besides School Medical Officers—an ophthalmologist, dental surgeons, a speech therapist, a child welfare officer and health education officers.[56] When the service was first initiated the diet of children attending schools was defective in protein, fats and vitamins but within a few years it reached very satisfactory standards.[57] Pasteurised milk and cod liver oil are distributed free to all children while those needing special drugs are also catered for. Pupils are examined at least three times during their school career while those requiring active attention are examined more frequently and, if necessary, referred to specialists for treatment.[58]

Special Schools still await development in Malta. As long ago as 1901 an enlightened Director of Education had occasion to remark on the absence of Special Schools for physically handicapped children in these Islands;[59] however, more than half a century had to elapse before a move was made to open special classes. The possibility of establishing such classes for deaf and dumb children was first considered by the government in 1954[60] and early in 1956 two experts were invited from the United Kingdom to advise the Education Department on matters relating to the special education of the deaf. As a result of these efforts two classes were opened in May 1956 at the Pawla Girls' School for children suffering from this disability.[61] By 1960 a Deaf Children's Unit was in existence at the new school at Pietà.[62]

---

[51] *Times of Malta*, 10th August 1953, p. 9.

[52] *Times of Malta*, 11th December 1951, p. 7.

[53] *Malta Government Gazette Supplement*, 13th June 1901, pp. i and ii.

[54] *Statistical Abstract of the Maltese Islands*, Malta, 1946, pp. xxxi and 71.

[55] *Report on the Health Conditions of the Maltese Islands for 1943*, p. iv.

[56] *Report on the Health Conditions of the Maltese Islands for the year 1955*, p. 54.

[57] *Report on the Department of Education for 1936–37*, p. xvi. *Report on the Department of Education for 1931–32*, p. iv.

[58] *Report on the Health Conditions of the Maltese Islands for the year 1955*, p. 54.

Plans for providing similar facilities for those with disabling defects of vision were prepared by the government in 1955. Contacts with the British Empire Society for the Blind were made in 1956 when its director came to Malta to advise government on the problems of the education of the blind. In 1960 the few blind children of school age were grouped into one class at Pietà under a specially trained teacher. A Centre for the Blind was established at St. Vennera in January 1959 for the training of adults in crafts and braille.[63]

The provision of special schools for educationally subnormal children first engaged the attention of the government in 1955.[64] The shortcomings of the Compulsory Education Act (1946) with regard to the educable mentally defective child were pointed out at a meeting of the Malta Branch of the British Medical Association as long ago as September 1946.[65] Such children were either exempted from compulsory attendance or else kept in one class and taught on a different syllabus.[66] No statistical data are available as to the extent of mental deficiency in the Maltese Islands and no reliable means of assessment have as yet been devised as no intelligence tests for Maltese children have so far been worked out. A Children's Clinic operates in conjunction with the Out-patient Psychiatric Clinic at St. Luke's Hospital since 1955. Classes for the occupational training of thirty mentally handicapped children were started at Wardija by the Education Department in December 1959.

[59] *Malta Government Gazette Supplement*, 13th June 1901, p. vii.

[60] *Times of Malta*, 24th February 1954, p. 9.

[61] *Times of Malta*, 31st May 1956, p. 10.

[62] Vassallo, J. P., Director of Education. Personal communication of 12th January 1960.

[63] *Times of Malta*, 26th January 1957, p. 6. Vassallo, J. P., *loc. cit.*

[64] *Times of Malta*, 24th May 1955, p. 13.

[65] Cassar, P., 'The Education of the Intellectually Subnormal Child', *Scientia*, 1947, xiii. 159.

[66] *Times of Malta*, 21st June 1955, pp. 4 and 5.

CHAPTER 40

The Care of the Mentally Sick

EARLY ARRANGEMENTS

As in most European countries, the story of the treatment of the mentally ill in Malta up to the first half of the nineteenth century makes very sad reading. During the time of the Order of St. John of Jerusalem male mental patients were received into the Holy Infirmary and looked after by an attendant in a 'room for madmen'.[1] Two Chaplains of Obedience in the service of the hospital were detailed to be present during meal-times to ensure that every patient had his food. Personal restraint was the method in use to keep the patients confined to their beds and to prevent them from disturbing their fellow sufferers. When they became violent they were removed to a part of the basement of the hospital and there secured to the wall by means of chains or else restrained by pinioning. The windows of this basement were placed near the ceiling and opened on a level with the adjacent Wells Street. Passers-by and idlers could thus watch the patients and also annoy and excite them to fury—whence the popular name of the street '*It-trieq ta' l-imgienen*' (i.e. The Street of Lunatics) by which it was known as late as the seventh decade of the last century.[2] When patients were declared incurable or became too numerous, they were transferred to the Ospizio at Floriana. Here they were confined in small casement rooms and chained to the walls. The treatment they received was 'far from humane. They were badly housed, badly clothed, badly fed and too often unmercifully beaten in the belief that they were possessed by the devil'—a notion that was still current among the uneducated in the second half of the nineteenth century.[3]

In 1725 the female patients were cared for in the 'two rooms for madwomen' at the Hospital for Incurable Women at Valletta. Another room was acquired from an adjacent building by the Municipality of Valletta in December 1783 and annexed to the hospital for the reception of insane women.[4]

During the short French occupation of Malta (1798–1800) the female patients were transferred to the Ospizio while the male ones, together with the physically sick men of the Infirmary, were evacuated to the new hospital for civilian patients set up in the nearby monastery of Santa Maria Maddalena. They were placed in the right wing of the building. Here they were placed in irons[5] and restrained by chaining, the stone pavement of their rooms becoming 'considerably worn out by the constant friction of the chains' with which they were secured to the walls. They remained here until 1816 when, following the reform of the Charitable Institutions carried out by Sir Thomas Maitland, they were removed to the Ospizio at Floriana and housed in a building which was used as a Powder Mill during the time of the Order. As no adequate arrangements existed in Gozo for the care of mental patients such cases were sent to the Malta Ospizio.[6] Accommodation was on a very poor scale especially for the violent and dangerous patients who were kept in small, dark and ill-ventilated single-bedded rooms. Overcrowding became very marked in 1827 so much so that the Commissioners of Charity had to refuse admission to many patients. Important administrative changes were carried out in 1832 but the treatment meted out to the mentally sick underwent no modification. They still remained shackled with chains and subject to beatings at the hands of their warders. It has been recorded that some of them were kept naked and left to wallow in filth until death delivered them from their sufferings and degradation. Progress, however, was registered in another direction with the setting up of Observation Wards.

---

[1] *Notizia della Sacra Infermeria*, Rome, 1725, p. 8.

[2] Inglott, F. V., *Brief Historical Account of the Treatment of the Insane in Malta*, Malta, 1867, p. 4. Manuscript 377, fol. 28, Royal Malta Library.

[3] Inglott, F. V., *op. cit.*, p. 5.

[4] Manuscript in the possession of the author.

Observation Wards were first established in 1832 as a result of a meeting of the Permanent Committee held on the 17th December when it was resolved that all mental cases were to be received into the Civil Hospital, in the first instance, for a period of observation. The three Principal Medical Officers of the hospital were to assemble in a board to examine persons admitted into these wards and to decide whether they were to be discharged as sane or else retained at the hospital or sent to the Ospizio as they considered 'most advantageous for the recovery of the patient'. This very wise provision has forestalled by very many years the modern trend of treating certain types of mental illness in the general hospital rather than in a mental institution. A similar board composed as above but with the addition of the Ospizio Medical Officer was held at the Civil Hospital or at the Ospizio to examine patients considered fit for discharge to their homes.[7] In November 1834, owing to the great noise and inconvenience which patients under observation caused to other sick persons in hospital, it was decided to send mental cases straight to the Ospizio to undergo there the usual period of observation. This policy was again changed in July 1835 when persons under observation were received at the Civil Hospital with the exception of the 'furious and noisy' who continued to be admitted directly into the Ospizio. It appears that the Observation Wards at the Civil Hospital were done away with in 1849 when a small ward and cell 'cut off from view of the rest of the asylum' was set apart in the Female Division of Villa Franconi for the reception of persons under observation. Similar arrangements were projected for the Male Division.[8]

---

[5] Registro Decreti Lettere, fol. 72, Medical & Health Archives, Valletta.

[6] Permanent Committee from 1st January 1816 to 31st December 1829, fols. 64, 123, 138 and 160, Medical & Health Archives, Valletta.

[7] Resolutions of the Permanent Committee from 3rd March 1831 to 23rd June 1834, fol. 103, Medical & Health Archives, Valletta.

FRANCONI ASYLUM

In 1835 a mansion at Floriana was adapted as a 'mad-house' and the patients were taken there from the Ospizio towards the end of 1837. The choice of this house, however, was an unhappy one for structurally it turned out to be quite unsuitable for conversion into an institution for mental cases. The Commissioners of Charity were well aware of this difficulty and at first were reluctant to convert the mansion into an asylum but there was so much overcrowding at the Ospizio that they accepted the offer of the new place, although only as a temporary measure, for the accommodation of the eighty patients at the Ospizio.[9] The building was formerly the residence of a knight of the Order of St. John, Bali Fra Fabrizio Franconi, and the new institution became known as the Franconi Asylum or Palazzo Franconi or Villa Franconi. It consisted of two wings, one for each sex. They were divided into wards for the 'imbecile', the 'epileptic' and the 'tranquil' patients; there was also a ward, provided with ten small rooms, for excited patients and two padded rooms for self-destructive ones.

The administration of the asylum was in the hands of a layman but its medical direction was entrusted to a physician. At this time accounts of reforms effected in European asylums had inspired the more philanthropically minded intellectuals in Malta to provide a more humane and decent treatment for the insane. The first official step in this direction was taken by the Committee of Charitable Institutions when at its sitting of the 4th November 1837 it was resolved to model the Franconi Asylum on the more progressive institutions on the continent and recommended Dr. Thomas Chetcuti as its director.[10]

DR. THOMAS CHETCUTI

Dr. T. Chetcuti may very well be called the pioneer Maltese psychiatrist in the sense that he was the first Maltese physician to make a serious study of mental disorder and to devote the greater part of his life and energy to the care and treatment of the mentally sick.[11] He was born at Mosta on the 15th June 1797 and received his early education at a private school at Lija and at the Seminary of Mdina.[12] Having studied Latin and Italian literature and philosophy, he entered the university as a law student in 1815 and qualified for the doctorate in jurisprudence in 1818; however, having little inclination to take up law as a career and feeling himself drawn to medicine he went to Naples where he studied medicine and surgery, graduating in November 1821 and in April 1822 respectively. On his return to Malta he set up as a private practitioner at Rabat. In 1823 be became assistant physician at Santo Spirito Hospital and in April 1834 was made its medical superintendent. He left this post on being appointed Visiting Physician of the Lunatic Asylum on the 1st January 1838—a position which he occupied until the time of his death. His duties at the asylum did not prevent him from taking an active interest in all that affected the teaching and practice of medicine in Malta. He was an energetic member of the 'Società Medica d'Incoraggiamento' of which he was several times president. In 1842 he was chosen, together with Dr. Nicola Zammit, by this society to report upon the O'Malley scheme for the reform of studies in the University and Lyceum. Among the various changes which Chetcuti and Zammit submitted in their report, they proposed the extension of the academic course of medicine to six years. They also suggested that lectures in mental diseases should be held daily during the last four months of the fourth year while clinical instruction in psychiatry was to occupy the fifth and sixth years together with clinical medicine, surgery and obstetrics.[13]

---

[8] Resolutions of the Permanent Committee from 7th July 1834 to 9th August 1836, fols. 26 and 77. Letters to Government from 9th June 1849 to 26th August 1850, fol. 6, Medical & Health Archives, Valletta.

[9] Charitable Institutions, Book No. 29, fol. 265, Medical & Health Archives, Valletta.

[10] Cassar, P., *The Institutional Treatment of the Insane in Malta*, Malta, 1949, p. 18.

When the professorship of medicine at the University became vacant in 1856 on the death of Prof. G. C. Schinas, the Governor of Malta offered the chair to Dr. Chetcuti. As, however, the salary was only £40 a year Chetcuti declined the offer as he felt that he could not accept such a humiliating remuneration. He continued to divide his time and energy between his large private practice and his official duties until his death on the 17th March 1863. He was buried in Mosta Church in accordance with his wishes.

CHETCUTI'S PSYCHIATRIC THOUGHT

What is known about Chetcuti's psychiatric thought is limited to the first decade that followed his appointment as physician of Franconi Asylum. How his thought evolved during the next sixteen years of his career, which included the most mature period of his life, is unknown as his literary output is small and confined to three papers written between

---

[11] Cassar, P., 'Dr. Thomas Chetcuti', *Scientia*, 1949, xv. 110.

[12] Gulia, G., *Biografia di Tommaso Chetcuti*, Malta, 1863.

[13] Chetcuti, T., and Zammit, N., *Rapporto ragionato della commissione incaricata dalla Società Medica di esaminare il progetto di studi relativamente alla medicina*, Malta, 1842, pp. 34 and 36.

1841 and 1847.[14] He was a follower of Dr. Franz Joseph Gall, the founder of phrenology, but he was quite aware of the deficiencies of Gall's theory and of the many aspects of mental life which the Vienna school had failed to account for. Thus he confessed that examination of the exterior of the skull led to contradictory results and that a particular mental illness could not be correlated with any specific 'organ' in the brain, and that the nature of a psychosis could not be inferred from an examination of the external configuration of the cranium. He was convinced that mental disorder could occur with an apparently intact cerebrum and that, on the other hand, the mind could continue to function normally in the presence of structural changes in the brain. He held that certain psychoses were due to pathological processes involving structures other than the brain such as the liver and the intestines in the case of melancholia and hypochondriasis.

For diagnostic purposes he adopted Esquirol's classification of mental disorder into mania, monomania, idiocy and dementia but followed Pinel in classifying hospital patients into four groups—maniacs, tranquils, dements and convalescents. He employed both physical and psychological means in the treatment of his patients though the former was necessarily determined by the therapeutic ideas of his time. Cold applications to the head in the hope of relieving cerebral irritation, tepid baths to allay excitement and the administration of laxatives were the most commonly used remedies but great store was also laid on blood-letting, the application of vesicants on the back of the head and neck and of leeches on the sacrum.

He attached great importance to psychotherapy. He advocated the removal of patients from their homes to hospital as he noted that they began to improve as soon as they found themselves under a hospital regime and away from their domestic environment. He considered it the duty of the physician to govern the asylum by force of example and to avoid disciplinary measures that had the appearance of coercion. He impressed upon the attendants the need for gentleness and coaxing in their dealings with the patients and imbued them with the idea that in order to tame an excited patient the attendant must keep himself calm and avoid all semblance of anger and fear. He strove to fix the patient's attention on matters unconnected with his morbid thinking and to encourage him to develop normal interests and pursuits; hence the reason why he attached considerable importance to occupational therapy.

REFORM OF FRANCONI ASYLUM

Following his appointment as Visiting Physician to the Asylum, Dr. Chetcuti went abroad at his own expense to visit asylums in Italy, France and Great Britain. On his return he found Franconi no better than a prison.[15] As soon as he took over he liberated the patients from their chains and banished the use of the stick as a sedative measure; he restricted the use of seclusion and resorted to the strait jacket only in the case of restless and dangerous patients. He prohibited the attendants from using the epithet 'madman' when referring to or addressing patients and he kept a sharp eye on his employees for instances of ill-treatment of the inmates. He did away with punishments for patients who swore, stole food, tore clothing or attacked others and in order to ensure a better supervision of patients he increased the number of attendants. He kept a register in which he recorded the names, profession and addresses of patients, their dates of admission and discharge or death and diagnosis. In another register were recorded the deliberations of the Hospital Board which examined the patients on admission and sanctioned their discharge when they were fit to leave the asylum.[16]

---

[14] Chetcuti, T., 'Sulle manie', *Il Filologo Maltese*, 10th February to 30th March 1841. Chetcuti, T., 'Descrizione del pubblico manicomio di Malta', *Il Filologo Maltese*, 17th June to 22nd July 1841. Chetcuti, T., *Sulla Monomania Omicida Istintiva*, Malta, 1847. Cassar, P., 'Dr. Thomas Chetcuti', *Scientia*, vol. xv, no. 3, 1949, p. 110.

Before 1839 the patients had no breakfast and went without food after the evening meal until noon of the following day. Dr. Chetcuti not only introduced breakfast (coffee and bread) but also secured the provision of a more abundant diet for the other meals. Following this increased food intake the patients improved physically. The dermatoses, diarrhoeas, scurvy, oedemas of the legs and emaciation, which were common in the asylum and which were all due to vitamin deficiency, gradually disappeared. Particular attention was paid to the general cleanliness of the establishment and, to encourage the formation of habits of personal hygiene in the patients, douches were introduced. Stabilised patients were induced to occupy themselves in gardening, rush-work, knitting and sewing.

DECADENCE OF FRANCONI ASYLUM

In spite of Dr. Chetcuti's good intentions and reforms, the asylum did not fulfil the purpose for which it was intended. Its structural unsuitability was recognised by 1848 but in spite of Dr. Chetcuti's advice, in 1851, to transfer a number of patients to some other building to relieve the overcrowding, nothing was done. In the following year, owing to the lack of accommodation, the sick were placed in the water closets, bathrooms and under the staircase during the night. The situation became alarming in August 1854 during the cholera epidemic of that year when the infection appeared among the inmates of the asylum and twenty-one patients, out of a population of one hundred and seventy-two, succumbed to the disease. In the succeeding years Dr. Chetcuti continued to press for the removal of harmless patients to other institutions to lessen the congestion at the asylum but his suggestions were never heeded. Overcrowding

[15] Gulia, G., *op. cit.*, p. 13.

[16] Chetcuti, T., 'Descrizione del pubblico manicomio di Malta', *Il Filologo Maltese*, 17th June 1841.

brought about a disruption in the administration and nursing arrangements of the institution. The Comptroller of Charitable Institutions thus describes the pathetic state of the asylum in 1859 when the number of patients was about two hundred: 'It is . . . very badly distributed, ill-ventilated and exceedingly damp. The single-bedded rooms . . . were hardly large enough for a middle-sized man to move in, without ventilation and with untrapped urinals connected with the main drains. The stench and drain-gases proceeding therefrom were unbearable . . . The associated bedrooms of the violent and dangerous were without beds-steads and with water, literally, running through them and pavements always wet on which the patients slept in the proportion of 14 and even 16 individuals to an area of 15 by 9 feet with only one small opening for ventilation . . . The water closet rooms themselves, with open and untrapped drains, used to be converted into Restraint Rooms for the night. Spaces under stairs, leading to the yards, damp to a degree that the straw would become wet during a night were the ordinary single-bedded rooms for patients in seclusion . . . In the Female Division the building was in a worse condition than in the male. There being no Matron, the Female Ward Attendants were always left to themselves and the heartlessness of these real menials was everywhere apparent and beyond description. The patients in their menses were left wallowing in their own filth and fetid discharges until the period was over . . . The whole establishment contained no other furniture than a few boards on iron trestles with palliasses stretched upon them. A wooden bench (barrack shape) was to be seen here and there as a rare commodity. The patients were, therefore, obliged to sit on the bare ground during winter and summer. No store of bedding or clothing existed but a supply of condemned bedding and clothing from one of the other institutions was, occasionally, brought in to enable the patients to have a clean change. The poor lunatics, therefore, were not only left to wallow in their dirt until they became a nuisance to themselves and to others, but were always dressed in tatters and sometimes running away with a piece of blanket from their beds to cover their nakedness or protect themselves from the cold . . . Beating was often resorted to and other cruelties were inflicted to overcome the resistance of the violent patients . . . The effects of ill-treatment were seriously aggravated by the supply of bad food . . . The appearance of the cook and kitchen utensils were enough to convince you that the food was only fit to be thrown to animals. The dirt on the cook and on the kitchen utensils was inconceivably disgusting. No tables were prepared in any of the Divisions but each patient was given a ration in a dirty tin dish and allowed to go and stow himself in some corner and endeavour to swallow it . . . The wine allowed to the patients and the oil for the lamps were invariably smuggled in large quantities out of the establishment by the attendants . . . Discipline was unknown, insubordination ruled everywhere and the attendants appeared to terrify not only the patients but the officers also . . . Religion formed no part of the routine.

The place in short, taken as a whole was a perfect pandemonium.'[17] An attempt was made, late in 1859, to reform the administration of the asylum thanks to the efforts of the new Comptroller of Charitable Institutions, Sir F. V. Inglott, who was determined to turn the asylum from a 'horror' into a 'hospital of mental disorders'. The general appearance of the building was improved and furniture, clothing and food were supplied in sufficient amounts.

THE LUNATIC ASYLUM AT ATTARD

In 1849 the building of a new asylum was contemplated but plans were called for only in September 1852. The plan prepared by an Italian refugee, who is said to have styled himself an architect for the occasion, was selected but it was subsequently found that the plan was a mere copy of Wakefield Asylum which was built in 1818 and which had already been pulled down as 'inappropriate for its object' by the time the Malta asylum was being erected.[18] The work was commenced in July 1853 during the governorship of Sir William Reid and completed during Sir John Gaspard Le Marchant's government. The institution was opened on the 16th July 1861 for the reception of the 248 patients of Villa Franconi.[19]

In spite of its recognised structural defects and its obsolete panoptic system, the orderly atmosphere and organisation of the establishment impressed overseas visitors. Dr. J. M. Buck, medical superintendent of the Leicester and Rutland Lunatic Asylum, who saw it in 1863, 'was much struck with the absence of that profound melancholy and listlessness prevalent in many' of the large asylums in England and declared the asylum to be worthy of taking place 'amongst the foremost lunatic asylums in Europe'.[20] Dr. Max Von Pettenkofer of Munich was even more generous in his praise when he said 'that if he were ever to be afflicted with mental disease he would prefer the Malta establishment to any other'.[21]

In actual fact the running of the hospital was not as smooth as it appeared to the casual visitor. Difficulties with regard to accommodation and nursing arrangements dragged on for almost half a century before determined attempts were made to tackle them by the government. As early as November 1861 the hospital board was making requests for an additional wing in each division as the population of the asylum, which was meant to house from 180 to 200 patients, had reached 260. It had risen to over 330 in 1867. Repeated demands were made by the board between this year and 1883 but no action was taken by the government to build new wards. In December 1885 Dr. F. Xuereb, the Medical Superintendent, complained with the Comptroller of Charitable Institutions that the asylum 'on account of its disproportionate population was no longer a hospital for the care and treatment of patients suffering from mental disorder but a store for lunatics'.[22] The position became grave on the 1st September 1887 during the cholera epidemic of that year when the disease appeared in the asylum and when, owing to lack of accommodation, the patients attacked by the disease had to be isolated in three camp tents set up near the Main Gate of the hospital. It was this sad event which convinced the government of the serious need for enlarging the asylum; however, it was not until 1892 that the first additional building (the so-called Agricultural Colony) was ready for occupation by sixty male patients. An Infirmary in the Female Division was completed in 1894 and an Infirmary and an Observation Ward on the male side were opened in 1899. Other wards were added in 1909, 1928 and 1930 but a substantial reduction in overcrowding was achieved only in 1934 when, on the 15th January, another mental hospital for 200 patients was opened at Ghajnsielem, in the Island of Gozo, in the reconditioned Fort Chambrai.[23]

---

[17] Inglott, F. V., *The Madhouse in Villa Franconi*, Malta, 1886, pp. 1–5. *The Malta Times*, 24th July 1863, p. 1.

[18] Inglott, F. V., *Brief Historical Account . . .*, p. 7.

[19] *Malta Government Gazette*, 8th December 1905, p. xvi.

[20] *The Malta Times*, 6th August 1863, p. 2.

[21] Inglott, F. V., *Brief Historical Account . . .*, p. 8.

The struggle to obtain an adequate number of attendants to look after an ever rising population was arduous and tiring. There were times when seventy-five male patients were cared for by only three attendants (1880) and sixty-four female patients by only one attendant (1883). It is not surprising that patients often attacked one another and the attendants and that, much against his will, the Medical Superintendent was often compelled to resort to mechanical restraint and seclusion in cases where such measures could have been dispensed with if a sufficient number of attendants had been available. The problem was also an educational one. The attendants were mainly drawn from the villages and many of them were illiterate. It was difficult to find attendants who were able to read and write names and numbers and as late as 1890 the Medical Superintendent stated that many of his attendants were quite ignorant of the most elementary rules of nursing while 'now and then they were called upon to perform duties which they did not understand'.[24] This applied to both mental and general nursing. Dr. F. Xuereb tried to make up for these deficiencies by giving a course of lectures to the attendants on the management of the insane; but it was only towards the dawn of the present century that the nursing situation began to improve as regards educational standards and augmentation of staff. However, many of the attendants were still illiterate and untrained in 1932 so much so that it was intended to give them a course of instruction and to prepare for them a suitable handbook in Maltese;[25] but almost twenty years elapsed before a booklet

[22] Letters Issued, vol. xvi, fol. 92, Hospital for Mental Diseases Archives, Malta.

[23] *Annual Report of the Comptroller of Charitable Institutions for the year 1933–34*, p. xxviii.

[24] Letters Issued, vol. xxv, fol. 265, Hospital for Mental Diseases Archives, Malta.

[25] *Annual Report of the Comptroller of Charitable Institutions for the year 1932–33*, p. xxv.

on mental nursing was published for the first time in 1950, incorporating a series of lectures on mental nursing delivered to the attendants in March 1947.[26]

It was the intention of the hospital authorities in 1861 to manage the Attard asylum on the principles of the non-restraint system but this aim could not always be achieved and mechanical restraint became at times inevitable. The authorised means of personal restraint were (a) the tying of hands, (b) handcuffs, (c) waistband for shackling one or both hands, (d) strait jacket which consisted of a loose canvas covering with leather straps and fastening by a lock device, and (e) restraint bed to which the patient was strapped by leather bands from his limbs. Handcuffs remained in use until 1873 while the other forms of restraint were still being used as late as 1885 in the case of suicidal and surgical patients.

Isolation in a 'single room' or in a padded room was resorted to for the separation of patients who were dangerous to themselves or to others. Seclusion became less frequent towards the close of the century. In 1890 Dr. F. Xuereb had foreseen that seclusion was destined to become a *rara avis*. That prophecy, however, was not fulfilled until half a century later. In fact following the destruction by aerial bombardment of a series of single rooms in the Male Division during the last war, the opportunity was taken to convert them, on reconstruction, into private single-bedded rooms for convalescent and stabilised patients. The destroyed padded room was never replaced.

It has already been mentioned that one of the reasons for the prolonged use of mechanical restraint during the last century was an insufficiency of nursing personnel. Another factor which militated against the earlier abolition of the handcuff and the restaint bed was the disapproval, expressed by the Hospital Board, of chemical sedation in 1885. Chloral hydrate had been introduced in 1870 and potassium bromide and sulphonal were in use in 1878 and 1889 respectively but they were prescribed very sparingly. As late as 1895 it was feared that sedatives caused 'incurable dementia' and they were looked upon with as much disfavour as personal restraint. Indeed, when in 1891, Dr. F. Xuereb collected specimens of the 'armamentarium of the restraint system' in two glass cases as reminders of an outdated past, he did not fail to exhibit with them samples of hypnotic drugs to show his disapproval of the new 'chemical restraint' methods.[27] This bias, however, did not deter him from encouraging the use of snuff for its sedative effect on restless patients and from declaring that its action was better than a dose of chloral hydrate! In 1872 it was especially in demand in the Female Division. A regular addiction for snuff seems to have developed by 1895 when the patients employed in weaving threatened to strike unless their quota of snuff was increased, while refractory patients became destructive when they were not provided with their pinch. In the following year, however, steps were taken to curb its use on the suggestion of the Comptroller of Charitable Institutions who considered it to be a dirty and repulsive habit and who recommended some other substitute for calming excitable patients.[28]

---

[26] Cassar, P., *Taghlim fuq il mard mentali ghall-infermieri*, Malta, 1950.

[27] Letters Issued, vol. xxviii, fol. 193, Hospital for Mental Diseases Archives, Malta.

Hydrotherapy, as a sedative measure, was employed from 1864. The 'industrial occupation' of patients was organised on a firm footing in 1868. Weaving, lace-making, sewing and knitting were the main crafts in which the women were employed; the men were mostly engaged in agricultural work. By the end of the century the asylum was in a position to supply other institutions with vegetable produce and rush articles, while the shoe-making shop offered to carry out the shoe repairs of other establishments. This success, however, never made Dr. F. Xuereb lose sight of the fact that when work is prescribed as treatment its economic value is only of secondary importance and that in the selection of an occupation the patient should be allowed to follow his own inclinations and abilities.

Hydrotherapy, work and psychological (then called 'moral') treatment remained the sheet-anchor of therapy for many years well into the present century when the introduction of physical methods of treatment started to change the previously nihilistic outlook in psychiatry. Malta began to share in these important advances from 1932 onwards. Malaria therapy for neurosyphilis, prolonged narcosis and pyrotherapy for manic-depressive psychosis and schizophrenia were introduced between 1932 and 1935,[29] to be replaced in due course by more recent methods such as cardiazol (1938), electro-convulsive therapy and insulin hypoglycaemic shock (1943) and pre-frontal leucotomy (1947).[30]

The designation of Lunatic Asylum was officially changed to that of Hospital for Mental Diseases on the 2nd March 1928.[31] The present Mental Health Services Out-patient Clinic, held at St. Luke's Hospital, was first started, on a small scale, in 1938, the patients being seen at the mental hospital.[32]

---

[28] Letters Issued, vol. xxxiv, fols. 316–317, Hospital for Mental Diseases Archives, Malta.

[29] *Report of the Comptroller of Charitable Institutions for 1932–33*, p. xxiii; *for 1933–34*, p. xxix; *for 1934–35*, p. xxxi.

[30] *Annual Report on the Health Conditions of the Maltese Islands for the year 1938*, p. clix; *for the year 1943*, p. xxxviii; *for the year 1947*, p. xlvii.

[31] *Malta Government Gazette Supplement*, 2nd March 1928 (Act No. I of 1928), p. 139.

[32] *Report on the Health Conditions of the Maltese Islands for the year 1938*, p. clxi.

CHAPTER 41

The Care of the Aged and Infirm

THE 'CASA DI CARITA' OR 'OSPIZIO'

THE first government asylum or hospice for old and infirm men and women was set up in 1729 when some of the gunpowder stores ('*polverista*') of the Order of St. John at Floriana were converted into a poorhouse. The building was originally built for the manufacture and storage of gunpowder in 1665 and so it is not surprising that the accommodation provided for the inmates was unsatisfactory both as regards the number of beds and as regards comfort. With the object of having a better place for the reception and maintenance of destitute old men and women, Grand Master Fra Antonio Manoel de Vilhena founded the 'Casa di Carità' (House of Charity) on the 16th December 1732 in the vicinity of the former building which it replaced.[1]

The administration of the new institution was entrusted to a commission, under the chairmanship of a Knight Grand Cross, composed of ten members—four knights, a conventual priest, the bishop's vicar, two jurats and two prominent Maltese citizens. The choice of the commissioners was reserved to the Grandmaster. The commission met once a month, or more often when necessary, to examine the financial accounts of the institution and to consider the applications for admission into the asylum. One of the members had to pay a daily morning visit to the institution to supervise the distribution of the food and the cleansing of the wards and to see that the employees performed their respective duties and also to hear any complaints that the inmates wished to make regarding their treatment. The function of this official was considered to be so important that a carriage from the Palace of the Grandmaster was placed at his disposal to ensure that no transport difficulties interfered with his duty.

Only one meal was served during the day. This consisted of a loaf of bread, a first plate of '*minestra*' (a kind of vegetable soup) or pasta, and a second plate of fish or cheese with olives. Meat was to be had only on such feast days as Christmas or Easter and occasionally on other days when meat, confiscated by the government, was made over to the institution for consumption by the inmates.

The staff consisted of a surgeon, a captain, a chaplain, a clerk and a guardian. The surgeon made his morning round before the arrival of the commissioner. He was allowed to treat minor ailments himself but was obliged to send seriously ill patients to the Holy Infirmary or to the Hospital for Incurable Women according to their sex. The captain was the officer in charge of good order and discipline. On parade days he wore a silver breast-plate bearing the inscription 'Domus Charitatis' and held a baton in his left hand, allowing it to lean on his arm.[2]

---

[1] Archives 536, fol. 185, Royal Malta Library.

In April 1733 the commission or Venerable Congregation—as it was officially called—informed the Grandmaster that the income assigned by him to the institution was proving insufficient to meet the requirements of the asylum owing to the increasing number of invalids that were being admitted. At this period the population of the asylum averaged three hundred and eighty inmates a year. With a view to providing more funds the Grandmaster ordered the Municipality of Valletta to pay the establishment the sum of one thousand five hundred 'scudi' a year in accordance with a decree issued on the 9th April of the same year (one 'scudo' equals about one shilling and eight pence). To augment further the funds of the institution he promulgated another order on the 16th of the same month by which he imposed a small tax on insurance policies and maritime and other contracts. The tax was to be collected by the notary drawing up the contract and then made over to the Venerable Congregation. Furthermore by another edict of the same day, a monopoly was created in favour of the asylum for the sale of sublimate.[3] With the passage of years the notaries failed to pass on to the commission the proceeds of the tax on contracts imposed by the edict of the 16th April 1733, so that the institution was deprived of one of its sources of revenue. Following representations on this matter from the Venerable Congregation in 1764, the reigning Grandmaster renewed the edict of the 16th April 1733 and ordered the defaulting notaries to pay to the asylum all the arrears that were due over the past years. The tax was still being levied in 1816.[4]

In 1785 Grandmaster Emanuel de Rohan issued a set of regulations for the administration of the institution on which he conferred the title of 'Ospizio'.[5] These regulations remained in force until the 15th January 1816[6] when Sir Thomas Maitland, Governor of Malta, abolished the body of commissioners and assigned the management of the Ospizio to the Committee of the Charitable Institutions which he had formed in that year.[7]

---

[2] Lintorn Simmons, B., *Description of the Governor's Palaces in Malta*, Malta, 1887, p. 59.

[3] Archives 537, fol. 144, Royal Malta Library.

[4] Manuscript 388, no pagination, Royal Malta Library. *Malta Government Gazette*, 11th September 1816, p. 657.

[5] Manuscript 745, no pagination, Royal Malta Library.

[6] Micallef, R., *Origin and Progress of the Charitable Institutions*, Malta, 1901, p. 17.

[7] *Raccolta di varie cose antiche e moderne riguardanti Malta e Gozo*, Malta, 1843, p. 131.

Besides aged and crippled women, the female division of the Ospizio also received spinsters and women prisoners although in later years the administrators of the asylum were unwilling to use the institution as a House of Correction.[8] The different categories of inmates were kept separate from one another under the direction of a governess who was immediately responsible to the commissioners for the good management of the division. Most of the prisoners and girls were occupied in cotton-weaving and received half the proceeds from the sale of the finished cloth.[9] After the suppression of the Magdalen Asylum for reformed prostitutes by the French in 1798 some of the 'penitents' sought refuge in the Ospizio.[10] Later on, in 1804, the foundlings which were previously received in the Holy Infirmary were also transferred to the Ospizio by order of Sir Alexander Ball.[11] To add to the confusion, the male and female mental patients were moved there in 1816 where they remained until 1837, in which year they were taken to the newly established mental hospital at Villa Franconi in Floriana.[12] On the 1st November 1848 the inmates of the House of Industry were also transferred to the Ospizio.[13]

In 1856 the person in charge of the establishment was a lay superintendent who was also the clerk and storekeeper of the institution and had, in addition, the direction of the female prison attached to the Ospizio. By then the surgeon had been replaced by a resident physician who had charge of all the sick inmates of both sexes and likewise of the female convicts who fell sick.[14]

By January 1864 the population had reached the figure of seven hundred. The building had become unsuitable as an asylum not only as regards proper accommodation but also from the point of view of ventilation and general hygiene.[15] Attention had already been drawn to these defects by a commission set up by the 'Società Medica d'Incoraggiamento' which inspected the Ospizio and reported on its condition as early as 1848.[16] This commission condemned the building outright and proposed the erection of two asylums to replace the existing edifice—one in the southern and another in the western part of the Island. In coming to this decision the delegates were guided by both humanitarian and sanitary motives. They remarked that the majority of the inmates were country-folk who by being made to spend the last years of their lives at

---

[8] Permanent Committee from 1st January 1816 to 31st December 1829, fol. 21, Medical & Health Archives, Valletta.

[9] Conte Marchese, Breve notizia dell'Ospizio degli Invalidi della Floriana. Manuscript dated 6th August 1801 in the possession of Chev. Jos. Galea, Mdina.

[10] Ferres, A., *Memorie dell'Inclito Ordine Gerosolimitano*, Malta, 1881, p. 205.

[11] Micallef, R., *op. cit.*, p. 18.

[12] Laferla, A. V., *British Malta*, vol. ii, Malta, 1947, p. 73.

[13] Micallef, R., *op. cit.*, p. 18.

[14] *Instructions for the Guidance of the Officers and Servants of the Ospizio or Poor House at Floriana*, Malta, 1860. Charitable Institutions Inspector's Letter Book from 24th December 1853 to 14th August 1858, fol. 28, Medical & Health Archives, Valletta.

[15] Manuscript 648 contains the plans, Royal Malta Library.

[16] Manuscript 386, fol. 115, Royal Malta Library.

Floriana found themselves cut off from their relatives and friends who on account of the lack of transport facilities were unable to visit them as often as they wished. If, however, two asylums were to be provided in different parts of the countryside the problem could be solved as the inmates would become more easily accessible to their families. Memories of the cholera epidemic of 1837, which had carried off many of the inmates of the Ospizio, were still vivid in the minds of medical men. The commission, therefore, thought that the provision of asylums at a distance from inhabited areas would result in two very important safeguards to the public health, i.e. (a) the elimination of the risk of infection derived from the presence of a great mass of people crowded together in a building under unhygienic conditions, and (b) the removal to a safe distance of potential foci of disease from big centres of population such as Valletta and the three cities. None of these recommendations, however, was implemented.

It was during 1854 that the government started contemplating the construction of an adequate new establishment to replace the existing building. The elected members of the Council of Government had been pressing for years for its erection as they were hoping that its construction would, besides providing a home for invalids, also help in eliminating mendicity from the streets. 'As long as we have not a refuge for those who are unable to work', they said, 'we cannot apply an earnest remedy to the growing evil of begging in the streets.'[17]

Action was eventually taken in 1862 to provide funds for the new asylum. The plans were drawn up by Mr. T. H. Wyatt of London with the assistance of the Comptroller of Charitable Institutions, the Honourable F. V. Inglott.[18] The plans were submitted to various authorities on hospital construction. Miss Florence Nightingale and Dr. J. Sutherland were among those consulted. In a letter dated 23rd May 1862 addressed to the Hon. F. V. Inglott, she expressed herself thus: 'The plans are so good (far better than those of any hospital for men and women I have ever seen) that the difficulty was how to find a fault. I could not discover a single sanitary lapse.' In another letter of the 23rd August she wrote to Mr. T. H. Wyatt: 'It is a consolation to know that there will be one good civil hospital in the British Dominions for an example.'[19] Dr. J. Sutherland and Capt. D. Galton declared: 'We have never seen any plans for similar civil purposes at all approaching them in their arrangements for health, comfort and convenience.'[20] In spite of this enthusiastic reception the scheme had to be abandoned owing to unforeseen circumstances. In those days the erection of a new Opera House was also being contemplated by the government but the elected members of the Council of

---

[17] *Letter to H.E. the Duke of Newcastle . . . by Four Elected Members of the Council of Government*, Malta, 1864, pp. 22–23.

[18] Manuscript 410, no pagination, Royal Malta Library.

[19] Manuscript 396, no pagination, Royal Malta Library.

[20] *Ibid.* Letter dated 13th August 1862.

Government insisted that the Opera House should not be commenced before the construction of the asylum for the aged and infirm had been taken in hand. During the discussions that ensued in the Council the Crown Advocate assured the Council that, according to the calculations made by the government, sufficient funds were available to proceed with the erection of the Opera House and of the Asylum simultaneously. The Hon. F. V. Inglott was, therefore, sent to England to collect information about contemporary improvements that were being introduced into similar institutions there. When the various sanitary innovations suggested by Inglott were incorporated in the original plans the cost of the projected asylum rose to a very much larger sum than had been previously anticipated. Meanwhile the Opera House had already been commenced and, as the available funds were no longer sufficient to meet the remodelled plans, the erection of the asylum had to be put off.[21]

The unhealthy state of the Ospizio did not cease to occupy, very seriously, the attention of government. In the absence of the necessary funds for a suitable building, an attempt was made by the Comptroller of Charitable Institutions to gain possession of the old Courts of Justice at Mdina—which were then being used as a sanatorium by the military authorities—for conversion into a Poor House; but his efforts in this direction were unsuccessful.[22] In the meantime, to relieve the overcrowding the practice was started of discharging during the summer months as many of the inmates as were willing to return to their relatives and friends on an allowance, in lieu of rations, of three pence a day. This measure not only benefited the institution from the sanitary point of view but also contributed 'towards economy in the vote for provisions';[23] however, it was not always easy to persuade the inmates to leave the asylum on this allowance and in May 1873 the government had to increase it to encourage them to leave the institution.[24] This problem cropped up every summer. On one occasion (1886) when the inmates' reluctance to quit the asylum could not be overcome and when the population reached five hundred and forty the experiment was tried of transferring a number of the inmates to some wooden huts outside Porte des Bombes on the outskirts of Floriana but this plan was abandoned in subsequent years. In fact the accommodation was so inadequate that the inmates had either to remain in the open air exposed to the sun or else had to crowd themselves into the huts which, to make matters worse, had become infested with vermin.[25]

Action on the part of the government was not encouraged by the report of Sir P. G. Julyan who felt convinced that the government was doing 'far more for the people in the way of so-called charity' than was really beneficial for them.[26] He declared that the Ospizio 'not being a curative institution should not be made in any way attractive' for fear of encouraging the people to be improvident! The ever present dangers of overcrowding caused quite a scare in September 1885 when an explosive outbreak of diarrhoea and vomiting occurred among the inmates. Sixty-two patients were affected. The medical staff and the Comptroller of Charitable Institutions could not but feel alarmed as cholera was then very common in the Mediterranean basin. The alarm proved to be a false one for the 'epidemic' disappeared as suddenly as it had appeared; but as a precautionary measure fifty inmates were evacuated from the Ospizio to Selmun Tower near Mellieha to thin the population.[27] There they remained until the end of the year when, because of the advent of the cold season, they were taken back to Floriana.[28]

---

[21] Webster, W. B., *British Governors and Foreign Grumblers*, Malta and London, 1864, p. 55.

[22] Letters to Government from 31st January 1872 to 11th June 1878, fol. 68, Medical & Health Archives, Valletta.

[23] *Ibid.*, fol. 160.

[24] *Ibid.*, fol. 171.

[25] Letters to Government from 23rd March 1883 to 20th April 1888, fol. 571, Medical & Health Archives, Valletta.

The cost of maintenance of an inmate in 1887 was four pence a day. Apparently such a small amount could go a long way in those days if we are to accept the report of a government board which declared that the diet was 'very wholesome and in all respects sufficient and quite adapted to the daily wants' of the inmates. These, however, did not seem to have been in agreement with the findings of the government officials. In fact for a long time carts loaded with fruits, tobacco and vegetables used to gather daily in the vicinity of the principal entrance of the asylum to sell their articles to the inmates. Unfortunately the quality of these foodstuffs was of an inferior kind and 'if not a refuse and of the worst quality, certainly of a very bad description consisting generally of unripe fruit, rotten vegetables and unwholesome eatables'. To put a stop to the activities of unscrupulous vendors and to the 'vicious habit of gluttony' of the inmates, the latter were prohibited from consuming bought articles of food except snuff, sugar and oranges, under penalty of discharge from the institution.[29]

Conditions at the Ospizio moved towards a climax in 1885. When His Excellency the Governor, Sir J. A. Lintorn Simmons, visited the institution during this year he found it to be an 'unsanitary and wretched hole' and a 'scandal to the age in which we live'. He insisted on the immediate erection of a new asylum on the revised plans prepared by Inglott. Their approval by the Secretary of State for the Colonies was not late in coming and work was begun in 1886.[30] The new 'Asylum for the Aged and Incurables' or 'Poor House' was opened on the 3rd October

---

[26] Julyan, P. G., *Report on the Civil Establishments of Malta*, London, 1880, pp. 27–28.

[27] Letters to Government from 23rd March 1883 to 20th April 1888, fol. 359, Medical & Health Archives, Valletta.

[28] *Ibid.*, fol. 401.

[29] Letters to Government from 1st July 1878 to 22nd March 1883, fol. 248, Medical & Health Archives, Valletta.

[30] Laferla, A. V., *op. cit.*, pp. 72–73.

1892.[31] In the following two weeks three hundred and seventy inmates from the Ospizio and two hundred from the Hospital for Incurables were transferred there while about two hundred patients, who had been temporarily discharged from the Ospizio on an allowance, were recalled to the new institution.[32] Female prisoners were removed to the women's prison which was set up in a section of the new asylum and where it remained until the construction of the present women's prison at Kordin in March 1895.[33]

The name of the 'Poor House' was changed to that of 'St. Vincent de Paul Hospital' in 1940.

THE OSPIZIO AT GOZO

Before an institution for destitute old people was provided at Gozo, it was the practice to maintain fifteen poor invalids of each sex at the hospitals of St. John the Baptist and of St. Julian respectively; but when the Hospital of St. John the Baptist was adapted for the reception of male and female patients in 1838, the invalids of both sexes were removed to the Floriana Ospizio at Malta. The want of an institution for old people in Gozo, however, soon made itself felt. The Gozitan invalids who had been transferred to Malta were homesick and could not but feel unhappy at the prospect of ending their lives among strangers and away from their families and friends. Besides, owing to the scarcity of rain that occurred in 1838 and subsequent years, the inhabitants of Gozo who relied on agricultural pursuits for their living became impoverished and many of them were driven to begging in the streets. They required not only food but also shelter.

A representation, setting forth the need for an asylum to cope with these problems, was made to His Excellency the Governor by the people of Gozo when he visited that Island on the 7th February 1848. Immediate steps were taken for the erection of a building adjacent to St. John's Hospital, the foundation stone being laid on the 13th June 1849. The new institution was opened on the 24th June 1851, its entire complement of 172 beds being occupied by the end of that year.[34] It is still functioning.

SAURA HOSPITAL

The first private institution devoted exclusively to the care of the aged and infirm was founded at the initiative of a Maltese physician, Dr. Nicolò Saura. The new establishment was set up at Rabat and though it was officially named St. Nicholas' Hospital it came to be known as Saura Hospital after its founder. All his wealth accrued to the hospital after his death as well as that of his daughter Isabella. He appointed as executors of his will the bishop, the archpriest of the cathedral and two gentlemen from Mdina.

---

[31] Micallef, R., *op. cit.*, p. 24.

[32] Letters to Government from 20th April 1888 to 8th April 1895, fol. 577, Medical & Health Archives, Valletta.

[33] Miscellaneous Letters Issued from 7th June 1892 to 16th March 1895, fol. 184, Medical & Health Archives, Valletta. *Malta Government Gazette Supplement*, 1st March 1895, p. 8.

[34] Manuscript 384, no pagination, Royal Malta Library.

Isabella died in 1667 and the building was commenced in the same year, the foundation stone being laid by Bishop L. Bueno on the 6th September. Three years later two wards and a kitchen were ready and a few poor women were admitted. When Bishop M. G. Molina visited the hospital in 1680 he laid down rules and regulations for the proper government of the institution and tried to put a stop to a lawsuit in the courts of Palermo and Rome in which 'up to that time the major part of the income of the hospital had been squandered'.[35] In 1762 the Rev. M. Azzopardi, the parish priest of Zebbug, endowed it with his property on condition that admission was granted to old priests from his village and to those in the service of the Cathedral and of the church of St. Paul's Shipwreck.[36]

The building was enlarged in subsequent years through the donations and bequests of many pious individuals.[37] The present edifice was built on plans prepared by the Maltese architect Lorenzo Gafà. Two chapels, one dedicated to St. Nicholas and the other to the Holy Virgin of the Rosary, were erected for the use of the male and of the female inmates respectively.[38]

When the French occupied the Island in 1798, they took over the hospital for their sick troops, the necessary medicaments being supplied from Santo Spirito Hospital. Following the expulsion of the French soldiers from the countryside, the hospital passed into the hands of the Maltese insurgents.[39] With the establishment of peace in the Island, the hospital was reconverted into a home for old people but in 1839, Bishop F. X. Caruana, of whom it has been said that he wielded 'the sword, the shuttle and the crosier' as the occasion required, set up a cotton manufactory in the ground floor of the building[40]—a venture that has long disappeared.

The institution is entrusted to the care of the Sisters of Charity.

ST. JOSEPH'S HOSPITAL, ZEBBUG (MALTA)

On the 4th March 1778 a butcher from Zebbug, Gio. Battista Debono, bequeathed a large sum of money for various charities stipulating that in the event of a hospital being erected in the village the interests derived from what remained of the capital were to accrue to the hospital. Through the efforts of Rev. Joseph M. Pullicino and of the pharmacist Vincent Farrugia some houses and a garden were acquired with the proceeds from Debono's bequest for the setting up of an institution for the reception of a few aged and invalids of both sexes.

---

[35] Manuscript 390, no pagination, Royal Malta Library.

[36] *Almanacco di Malta per l'anno 1863*, Malta, p. 10.

[37] Galea, A. M., *Il Carità f'Malta u Ghaudex*, Malta, 1912, p. 39.

[38] Ferres, A., *Descrizione storica delle chiese di Malta e Gozo*, Malta, 1866, p. 124.

[39] Manuscript 192 Università, no pagination, Royal Malta Library.

[40] MacGill, T., *A Handbook or Guide for Strangers Visiting Malta*, Malta, 1839, p. 101.

The decree authorising its establishment was issued by Bishop V. Labini on the 7th November 1787, the hospital being declared open on St. Joseph's day, the 19th March 1788.[41] The wards, according to the usage of the time, were provided with an altar at one end for the celebration of religious services.[42]

It is now under the direction of the nuns of the Tertiary Order of St. Francis.

ST. ANNE'S HOSPITAL, SENGLEA

This small asylum for needy old women was founded by Nicola Dingli of Siggiewi and his wife Maddalena Cornelio of Senglea on the 3rd March 1794. It is run by nuns of the Tertiary Order of St. Francis.[43]

ST. PAUL'S HOME, HAMRUN

The Society of the Little Sisters of the Poor was founded in Brittany in 1840 for the alleviation of the sufferings of old infirm people. The nuns first came to Malta in 1878 and opened a home for old people at Pietà. In June 1880 they moved to the erstwhile country residence of the Bailiff de Blacas of the Order of St. John, where they still carry on their charitable mission. The institute affords care for about two hundred persons and is supported by public charity and private contributions.[44]

---

[41] Galea, A. M., *op. cit.*, p. 42.

[42] Ferres, A., *Descrizione storica . . .*, p. 424.

[43] Galea, A. M., *op. cit.*, p. 48. Ferres, A., *Descrizione storica . . .*, p. 265. Ferres, A., *Storia ecclesiastica di Malta*, Malta, 1877, p. 462. Manuscript 386, fol. 90, Royal Malta Library.

[44] Ferres, A., *Memorie dell'Inclito Ordine . . .*, p. 234. Galea, A. M., *Is-sorijet tal Fkar*, Malta, 1928, p. 23.

CHAPTER 42

Industrial Health

FOR hundreds of years the inhabitants of the Maltese Islands were mainly engaged in agricultural pursuits. With the appearance of Moslem corsairs in the Mediterranean in the late Middle Ages life and property in Malta became very insecure on account of the defenceless state of the Islands which for centuries remained an easy prey to piratical incursions. This economic instability tended to drive the peasants away from the soil and to tempt them to earn their living as sea-farers; however, so many of them lost their lives at sea or were captured and made slaves by the corsairs, that the countryside became seriously depopulated until King Alphonse V, in 1456, prohibited the inhabitants from seeking their fortune at sea. While the countryside was in such an unsettled condition, craftsmanship had the opportunity to grow and develop in the comparative safety of the environs of the castle of St. Angelo, near the harbour, and the fortified walls of the inland capital of Mdina. By the fourteenth century we find the craftsmen of the Island organised into guilds that protected their commercial interests and privileges and also supervised the training and licensing of apprentices.

Before the eighteenth century the incidence of occupational accidents and diseases was negligible. By the beginning of the eighteenth century, however, occupational diseases became sufficiently common on the continent of Europe to warrant a treatise on the subject by Dr. Bernardino Ramazzini of the University of Padua in 1700.[1] But Malta was still predominantly an agricultural community, and for this reason Ramazzini's work had no practical bearing on local labour conditions and the Maltese guilds, apart from affording financial assistance to their members during illness, did not concern themselves with the safeguarding of the artisan from the hazards to life and limb arising out of the nature of his work.

As far as can be ascertained the earliest recommendations put forward with regard to the safety of workers were those submitted to the government of the Order of St. John of Jerusalem in 1780. The occasion that gave rise to them was a very exceptional one and although they constitute an isolated attempt to safeguard the health of the worker they are worth considering in some detail in view of their comprehensiveness. They are contained in a report drawn up by the Royal Medical Society of Paris addressed to the Grandmaster of the Order on the measures to be taken on opening up the graves and exhuming the corpses interred beneath the church of St. Dominic at Valletta. The following were the precautions advocated: (a) the work was to be undertaken in winter time preferably at night when, owing to the low temperature, the development of foul odours was likely to be at a minimum; (b) the labourers were to cover their mouths and nostrils with a piece of cloth or a sponge soaked in vinegar; (c) while opening up the grave, the workman was to turn his head aside, stop breathing and then recede from the grave to respire wholesome air; (d) before descending in the newly opened tomb, the workers were to test the nature of the gases by means of a lighted candle and afterwards light a fire on a grating placed over the aperture of the grave to ventilate the tomb and 'replace the mefitic gases by respirable air'; (e) those descending into the grave were to carry a small bell and to be lowered down by means of ropes tied round their waists so that they could be promptly hauled up at the first danger signal given by means of the bell; (f) special ventilating shafts were to be provided while the workers were digging inside the graves and fires of tarred wood were to be lighted on the floor of the tomb to purify the air; (g) many workmen were to be engaged to make it unnecessary for the labourers to work under the above conditions for long periods; (h) finally a number of physicians and surgeons were to stand by to give the necessary aid in case any of the workmen were asphyxiated. The means recommended to combat the last eventuality were: (a) throwing of cold water over the unclothed body of the victim to stimulate respiration; (b) insufflation of the lungs by means of a tube introduced into the patient's mouth or nose; and (c) agitation of the air in the patient's vicinity by means of a fan or similar object.[2] This report bears the signature, among others, of the famous Vicq d'Azyr.

---

[1] Ramazzini, B., 'Saggio sopra le malattie degli artefici', *Enciclopedia delle Scienze Mediche, Settima divisione*, Venezia, 1844, p. 12.

Sustained interest in occupational health began to manifest itself comparatively recently when the widespread use of machinery and the growth of factories created new trades and new dangers to the workers' health. It must be borne in mind, in this respect, that the industrial expansion that took place in England in the second half of the eighteenth century had no counterpart in Malta. In fact the only big industrial establishment in the Island by the middle of the following century was the Naval Dockyard where the workers were still nearly all shipwrights, sailmakers or ropemakers whose tools were all of a manual kind such as the axe, adze, saw, sail needle and rope jack. It was only during the fifty years following the Crimean War that the impact of mechanical power was felt here when the change from sail to steam took place and the stage was set for the development of the Island as a naval base for the British

[2] Vivenzio, G., *Risposta a molte quistioni proposte alla Società Regale di Medicina di Parigi*, Napoli, 1781, p. 35.

fleet in the Mediterranean.[3] Even so the transition from the old manual method of industry to the new proceeded slowly so that the need for protective measures was not immediately felt. Hence the late inception of factory welfare work in Malta which in a highly industrialised country like England found expression in the Factory Act as long ago as 1833.

The first legislative measures to be introduced in Malta was the Workmen's Compensation Ordinance. A bill to make provision for compensation to workmen for injuries sustained and diseases contracted in the course of their employment was initially proposed at a sitting of the Council of Government in November 1920.[4] In his address to the Senate and the Legislative Assembly a year later, His Excellency the Governor declared that it was the government's duty to protect the interests of the working classes and emphasised the early necessity of bringing into force the Workmen's Compensation Act that had been prepared by the Crown Advocate;[5] yet this act did not come into operation until the 19th August 1929, eight years later (Act No. VI of 1929).[6] That it fulfilled a great need is shown by the fact that in the first six months following its implementation over 1,100 workmen received compensation varying from 50 to 75 per cent of their earnings. It is remarkable, however, that owing to the ignorance of the workers themselves, it did not prove welcome at the beginning. Indeed it took some time and a good deal of effort to persuade the workers—some 33,000—to register with the Labour Department before the new law came into effect and to make them understand how much they stood to gain by the projected act.[7]

With the passage of time the original benefits established by the Act became inadequate; besides, no provision for sickness existed under the Act. To remedy these deficiencies the 'Employment Injuries Insurance Bill' was introduced and read a first time in the Legislative Assembly on the 6th December 1951, but it was only on the 7th May 1956 that the Workmen's Compensation Ordinance was repealed and substituted by the National Insurance Act (Act No. VI of 1956) providing, among other things, for sickness, unemployment, industrial injuries and old age.[8]

The first efforts, made in 1921, to fix a limit to the number of working hours[9] culminated in the promulgation of the Weekly Rest (Bakers and Barbers) Act of 1933 and of Ordinance No. XVII of 1936 which empowered the Governor to fix the number of hours of work of employees in shops and other establishments.[10] Since then various orders have been issued regulating hours and wages in several spheres of employment.[11] Another welcome measure having an indirect bearing on the worker's health was the regulation of the employment of children and women in factories. It formed the subject of a bill presented by the Minister for Justice at the sitting of the Legislative Assembly on the 17th February 1922. The bill fixed the earliest age of employment of children at twelve years, prohibited the employment of children under fourteen years and of women under eighteen at night and in unhealthy work, and disallowed the employment of parturient women until three weeks after their confinement. It also obliged the employer to adopt the necessary measures for the protection of the health and safety of the worker of either sex.[12] In November 1924 this bill was again brought before the Legislative Assembly as 'The Factories Regulation Act' but it only became law in 1926 after the age of employment of children was raised to fourteen years (Act XXI of 1926).[13] Further measures for the protection of children were secured by the Employment of Children (Regulation) Ordinance which was passed by the Council of Government on the 16th March 1944 and which made it unlawful to employ children and youths under sixteen years of age in occupations likely to be injurious to health such as quarrying, match making and the handling of refuse.[14]

---

[3] Ballard, G. A., *The Development of Malta as a First Class Naval Base*, Malta, 1917, pp. 16–17.

[4] *Malta Government Gazette*, 19th November 1920, p. 776.

[5] *Ibid.*, 4th November 1921, p. 1014.

[6] *Ibid.*, *Supplement*, 29th April 1929 and 6th June 1930.

[7] *Ibid.*, 6th June 1930, p. vi.

[8] *Report of the Department of Emigration, Labour and and Social Welfare for the year 1956*, pp. v and xxiii.

[9] *Malta Government Gazette*, 11th February 1922, p. 84.

Factory hygiene and the provision of safety devices in dangerous occupations had been engaging the attention of the government since the outbreak of the Second World War. Ordinance X of 1940 (Factories Ordinance) empowered the Governor-in-Council to make provisions as to the cleanliness, ventilation, sanitary conveniences and removal of dust and fumes from factories; to ensure the adoption of safety devices in connection with machinery; and to provide for the notification and investigation of industrial accidents and diseases.[15] The maintenance of first-aid equipment in factories was enforced by the Factories (Health, Safety and General Welfare) Regulations of 1945.[16] The majority of factories and workshops in private industry were never designed as such and great difficulties were met at first by the Department of Labour and Social Welfare in connection with the improvement of health and welfare arrangements; but, thanks to the persistent efforts of this department, great progress has been achieved in rendering work-places healthier and safer.[17]

---

[10] *Malta Government Gazette Supplement*, 3rd July 1936, p. 683.

[11] *Report of the Department of Labour for the year 1949*, p. 13; *for the year 1950*, p. 11; *for the year 1951*, p. 11.

[12] *Malta Government Gazette*, 3rd March 1922, p. 127.

[13] *Ibid.*, 27th November 1924, p. 1087. *Ibid., Supplement*, 17th December 1926.

[14] *Ibid.*, 11th April 1944, p. 129.

[15] *Ibid.*, 9th April 1940, p. 433.

[16] *Malta Government Gazette*, 25th September 1945, p. 798.

[17] *Report of the Department of Labour for the year 1950*, p. 17. *Report of the Department of Emigration, Labour and Social Welfare for the year 1956*, p. xxii; *for the year 1958*, p. 30.

PART VII

NURSING AND MIDWIFERY SERVICES

CHAPTER 43

Nursing

As already stated (Chapter 3), Santo Spirito Hospital was the first hospital to be founded in Malta. The earliest mention of the presence of nurses at this hospital occurs in the manuscript records of the apostolic visit of Mgr. T. Gargallo, Bishop of Malta. Gargallo inspected the hospital in January 1599. He found that the institution accommodated from six to eight patients who were cared for by two female attendants. We are not aware of the exact part that these employees played in the running of the hospital but they must have been persons of some importance since it was to them that the bishop turned to inquire about the nature and amount of equipment possessed by the hospital.[1]

As the hospital of the Knights of St. John, built at Birgu in 1532, was reserved exclusively for male patients it is not to be wondered at that the personnel detailed to look after the sick belonged entirely to the same sex. These attendants were referred to as 'servants'; of their number and qualifications we know nothing but some information is available as to the nursing conditions prevailing at the Valletta Infirmary in the seventeenth century.

The Capitular Ordinances promulgated by the Order of St. John on the 1st June 1631 dealt, among other matters, with the government of the Holy Infirmary. Article 24 made it obligatory for all the knights to serve the patients personally. In order to avoid the confusion that would otherwise have arisen if all the knights went to the Infirmary at the same time, it was decided that each 'nation' or '*langue*' should do duty for a week by waiting upon the sick morning and evening. No fewer than seven knights, servant-at-arms or novices were to attend. Those who absented themselves were punished with the '*septaine*'.[2] This meant that the guilty knight was made to fast for seven consecutive days. On the fourth and sixth day he was allowed bread and water only and was beaten over his shoulders with a cane.[3] In 1725 the Knights' work in the hospital was defined in more detail. The regulations published in that year made it clear that the knights' assistance to the sick was confined to the distribution of the diets. In fact the knights and novices had to arrive at the infirmary during meal times to serve the patients, to warm their portions and also to exchange the items of the diet if the patient did not fancy what was prepared for him—always, of course, with the permission of the physician on duty. In later years a new roster of attendance for the knights was devised; instead of being on duty for a week, each '*langue*' was assigned one day per week for service at the infirmary. Sunday was reserved for the '*langue*' of Provence, Monday for Auvergne, Tuesday for France, Wednesday for Italy, Thursday for Aragon, Friday for Germany and Saturday for Castille and Portugal.[4]

---

[1] Visitatio Gargallo 1595, fol. 33, Archiepiscopal Archives, Valletta.

[2] Ordinationi capitulari 1631, fol. 29t, Manuscript in the possession of Chev. Jos. Galea, Mdina.

[3] Bosio, G., *Statuti della Sacra Religione di San Giovanni Gerosolimitano*, Rome, 1589, p. 266.

In accordance with the 1725 regulations there were to be fourteen servants or warders or guardians ('*servi*' or '*guardiani*'), two of whom were engaged in nursing sick knights. Since the average hospital population varied from 350 to 400 men, each servant was in charge of twenty-five to twenty-eight patients. The number of servants was increased to twenty in 1796. Their duties are simply described as consisting of attendance on the sick day and night.[5] Menial work was performed by forty-four Moslem and Christian slaves who were escorted to the Infirmary from the near-by Slave Prison.[6]

The attendants were under the control of the Infirmarian who was a professed knight and who had the authority to engage and dismiss the employees and to punish them when they failed in the performance of their duties. The regulations specifically laid down that the attendants were to make the beds every evening and to change the bedding as often as necessary 'even though they should require changing several times a day'. Many of the beds were provided with curtains and these, too, had to be changed for the requisite cleanliness, while the beds and bedding of patients suffering from consumption were burnt 'without any reservation'.[7] The attendants were held responsible for the loss of the silver plate while it was in use in the wards.[8]

The Statutes of the Order of 1588 made it incumbent on the Infirmarian to employ, as attendants, only those men who 'were diligent and of good repute';[9] but nursing standards appear to have sunk to a low level by the mid-eighteenth century. In fact the Venerable Commission appointed in 1765 to inquire into the financial affairs of the infirmary declared that the attendants 'neglect the poor sick, when they do not also ill-treat them, unless the patients buy them off with gifts of money' or bread. Steps were taken in the following years to put a stop to these abuses which were 'diametrically contrary to the spirit of the Order'.

---

[4] Bedford, W. K. R., *Regulations of the Old Hospital of the Knights of St. John*, London, 1882, p. 21.

[5] *Ibid.*, p. 55.

[6] *Ibid.*, p. 7.

[7] *Ibid.*, p. 15.

[8] Critien, A., *Holy Infirmary Sketches*, Malta, 1946, p. 44.

[9] Bosio, G., *op. cit.*, p. 48.

The number of attendants was increased and their salaries raised in 1770 but the behaviour of the nursing personnel did not improve with the passage of years.[10] Howard's picture of the attendants in the late eighteenth century is ugly indeed though in viewing it we must bear in mind that Howard visited the infirmary at a time when the Order of St. John was rapidly declining to its inglorious end. He thus describes the attendants and the nursing conditions in the Order's hospital: The patients (whose number had increased to 510–532) 'were served by the most filthy, ragged, unfeeling and inhuman persons I ever saw. I once found 8 or 9 of them highly entertained with a delirious dying patient. The governor told me they had only 22 servants and that many of them were debtors or criminals who had fled thither for refuge.' To understand how these delinquents came to be engaged as attendants one must remember that up to 1828 churches and a few other specified places enjoyed the privilege of sanctuary.[11] This meant that if a person who had committed a crime sought refuge from the law officers in a church or one of the specified buildings, the executive police could not enter the premises to arrest and remove him. During the time of the Order the Holy Infirmary enjoyed the privilege of sanctuary though persons accused of such major crimes as murder or robbery were excluded from its protection. Those who were given asylum within its walls were subsequently put on board the first ship that happened to be leaving Malta and thus sent away from the Island.[12] In this manner the infirmary got rid of its undesirable guests but since ships were not available every day it was inevitable that a nucleus of delinquents came to form a more or less constant feature of the institution, their actual number depending upon the incidence of crime and the availability of shipping.

In contrast with the inadequate number of attendants at the infirmary, Howard observed that about forty employees 'were kept to take charge of about 23 horses and the same number of mules in the Grandmaster's stables and that there all was clean'. He also remarked that the hospital beds were 'so dirty and offensive as to create the necessity of perfuming them'.[13] Independent evidence of the deterioration of nursing standards is afforded by a Maltese diarist who, describing a visit of the Grandmaster to the hospital on the 6th March 1773, wrote that the Grandmaster 'ordered the removal of the beds that stood around the altar and in which the servants used to sleep . . . Noticing that a servant had not removed some dirt that was lying about, he called the Infirmarian and threatened to send the guardians to the galleys if they did not clean and change the sheets of the sick'.[14]

Female employees staffed the Women's Hospital. There was a governess in charge of the general administration and there were four servants to attend to the patients' needs, make the beds and 'do anything else necessary'. These servants were expected to look after sixty to seventy sick women and to be proficient in nursing medical, surgical, obstetric, venereal and psychiatric cases. The distribution of the diets was carried out by a woman employed for the purpose while mercurial anointing was performed by a man engaged solely for this form of treatment.[15] Nursing conditions in this hospital were no better than those prevailing at the male infirmary at the time of Howard's visit. It then housed 230 patients. Besides being overcrowded the hospital was 'offensive and dirty'.[16] It is not surprising that nursing conditions were appalling when we learn that nursing, far from being considered a respectable occupation, was regarded as an adequate punitive measure for erring women. In fact we find that a term of service in a hospital was one of the several punishments awarded to women convicted of crime. The Code de Rohan of 1784 laid down that women found guilty of selling or pawning borrowed articles of gold and silver were to be sentenced 'to serve with a chain round their leg' in the hospital of the female invalids or in the hospital of incurable women for a period of two to four years. A similar penalty was awarded to women convicted of perjury or of enticing girls to a loose life.

---

[10] Archives 272, fols. 53, 183, 200t and 203, Royal Malta Library.

[11] Laferla, A. V., *British Malta*, vol. i, Malta, 1938, p. 140.

[12] Bosio, G., *op. cit.*, p. 51.

[13] Howard, J., *An Account of the Prinicipal Lazarettos of Europe*, London, 1779, p. 59.

[14] Manuscript 1146 bis, fol. 226, Royal Malta Library.

No women convicted of crimes were sent to serve their sentences at Santo Spirito Hospital where a better type of attendant was, therefore, to be found. Detailed rules for the 'guardians' were issued in 1795 during the time of Grandmaster Em. de Rohan. They are here reproduced in full (from the original Italian) as they constitute the earliest detailed set of nursing instructions in existence in Malta:

I. The guardians and servants of our hospital must be obedient to the Jurats (especially to the one who is on duty for the week), the Procurator and the Chaplain who is their spiritual father. If they fail to carry out the orders of these officers they will be punished, for the first offence, by the forfeiture of a month's salary, and, for a second lapse, by dismissal from the service.

II. They must keep the spinster-patients separate from the rest of the sick as far as circumstances permit.

III. They are to be diligent and charitable with the patients. They must not leave the sick unattended to loiter and amuse themselves at the door of the hospital and they must give all the necessary aid to the sick especially those who are moribund or gravely ill. These duties are to be strictly adhered to; the penalties laid down in Paragraph I are applicable for their non-observance.

IV. The servant in charge of the small ward ('*saletta*'), where one or more moribund patients may be lying, is not to stay away from the ward in order to be able to deal promptly with all eventualities.

---

[15] Bedford, W. K. R., *op. cit.*, pp. 35 and 39.

[16] Howard, J., *op. cit.*, p. 60.

V. The guardians are to send away all visitors from the wards fifteen minutes before the doctor's round and before the distribution of the diets. They must, besides, close the two doors leading to the staircase until the end of the doctor's visit and until the silver plate has been cleaned and counted.

VI. The guardian of each ward must, during the doctor's round, stay at his side to hear his instructions properly and thus avoid mistaking the beds when administering the remedies ordered by him.

VII. They must not interfere with the work of the physician, surgeon and barber-surgeon by expressing opinions, sometimes with partiality, in favour of the sick.

VIII. They are not to neglect to carry out the orders of the physician with regard to the diets that are to be served at a late hour; non-compliance with this rule is punished by the forfeiture of a month's salary.

IX. They must not give broth to the sick when *pasta* has been prescribed nor give *pasta* instead of broth; otherwise they incur the penalties contemplated in the preceding paragraph.

X. The guardians are prohibited from accepting from the baker any hard bread (not even when it is a day old) for the patients. They are, likewise, not to appropriate for themselves the fresh bread and to replace it with hard loaves under penalty of losing their rations for a week.

XI. They must not allow visitors to introduce any kind of article for the sick; otherwise they forfeit a month's salary.

XII. Twice a day, at noon and at the sounding of the Angelus bell, they are to search under the patients' mattresses for any items of food that the sick may have been given clandestinely and that may be harmful to them.

XIII. Every guardian must not fail to sweep the floor of her ward, even underneath the beds, and to remove the soot that accumulates about the windows; otherwise she forfeits two months' salary.

XIV. No guardian is to change her roster of duties. She must attend to the sick in her ward and refrain from interfering with the affairs of the other wards.

XV. Guardians are not allowed to leave hospital except for some personal and pressing need; in such an event at least two of them must remain in hospital even when the number of patients happens to be small.

XVI. They must not permit the sick, especially the spinsters, to have visitors who are not related to them without the sanction of the Jurat of the week.

XVII. At the ringing of the evening Angelus bell, they must lock the door leading to the staircase and also the gate. The keys are to be handed immediately to the chaplain.

XVIII. The oil-lamps for ward illumination must be well lighted. If the guardians economise in the consumption of the oil to save it for their own use, they lose their salary for a fortnight.

XIX. At the end of each month the guardians must submit to the

Procurator an exact account of the silver plate, clothing and other articles provided by the hospital for the use of the sick including bandages and similar items and also the clothing issued to the servants. In the event of the loss or theft of the said silver plate and clothing, the guardians are bound to make good the damages 'in solidum'; should they not possess ready cash they will be made to serve the hospital without salary until the institution has been fully compensated.

XX. The laundress is responsible for the safe-keeping of the clothing that is put up to dry under the arcades of the hospital.

XXI. Mattresses, sheets and other articles are not to be taken out of the hospital for domiciliary patients except as is usually done in cases of urgent necessity and only after the written permission of the Jurat of the week has been obtained, under penalty of refunding their value.

XXII. Guardians must avoid conversing with anyone and must, as far as possible, work in silence having regard to the requirements of the hospital. If one of them receives an insult she must refrain from retaliating but must wait for the arrival of the Jurat to whom she is to submit her grievance for necessary action.

XXIII. Guardians are prohibited from communicating with the cook and his subordinates under penalty of expulsion from the service.

In 1796 the regulations of the Holy Infirmary were revised. A distinction began to emerge at this time between the duties and obligations of the guardians or nursing attendants and those of the servants whose duties were confined to domestic work in the wards and in other departments of the hospital, such as the kitchen, provision store and the laundry. The guardians were divided into two categories according to seniority. The juniors became entitled to a rise in pay after ten years service; they entered the senior grade when a vacancy occurred and only after being approved by the hospital authorities. The guardians worked in shifts of one week on and one week off duty, drawing no pay and no rations for their off-duty periods; however, if they fell sick and had to be treated in the Infirmary, they received their full pay but no rations, the food being issued to the employee who substituted for them.

Apart from nursing work proper, the attendants were responsible for maintaining discipline in the wards, preventing women from gaining access to the wards reserved for moribund patients, seeing that food was not introduced for the sick by outsiders and that the patients did not exchange their own diets. The attendants themselves were forbidden to sell their rations to the sick, to take food out of the infirmary and to accept gifts from the patients. They were entrusted with the safe keeping of the silver plate, the bed linen and clothing and had to ensure that the oil provided for the lighting of the ward lamps was properly used. Finally they had to perfume the wards with rosemary every morning and evening. Disregard of these regulations was punished by 'placing in irons' or by dismissal.[17]

---

[17] Archives 1714, fols. 203 and 220, Royal Malta Library.

THE NINETEENTH CENTURY

The next set of nursing rules to be drawn up were those of 1802 when the hospitals of Valletta were reorganised in the first years of the British connection.[18] Except for some alterations of a minor character, the old system prevailing under the Order's government was retained for almost half a century until, some time after the opening of the Central Hospital at Floriana, regulations for this new hospital were published in 1851.

Immediately on their engagement, attendants and other employees of the Central Hospital were required to sign the Scale of Fines for neglect or omission of duty. In order that employees might not adduce ignorance of hospital rules as an excuse for their defaults, a series of instructions was prepared and read to them twice a day for the first week; if, after this period, they still had some difficulties to clear they were to apply to the Wardmaster or Mistress for further enlightenment. Thenceforth they were held responsible for breaches of discipline and regulations. They were prohibited from wearing beards and moustaches or wearing their hair long; from throwing bones or rags out of the windows or into privies; from washing clothes in the wards or hanging them out of windows; from smoking and from introducing tobacco or spirits into the hospital. They were provided with uniforms and were required to be orderly in behaviour and cleanly in their persons.

A Defaulters' Book was kept in which the details of neglect and omissions on the part of attendants were entered. This book was submitted to the Inspector of Charitable Institutions every week and when the name of an employee appeared in it five times for the same offence, the person concerned was dismissed from the service. To discourage malingering by the feigning of illness, employees who reported sick were treated in hospital; if they refused they forfeited their pay.

The designation of 'nurse' instead of 'guardian' was first introduced in March 1860 by the Comptroller of Charitable Institutions Mr. (afterwards Sir) F. V. Inglott.[19] The social class from which nurses were recruited was that of the illiterate and uneducated. As late as 1881 Prof. S. L. Pisani complained that, with one exception, none of the nurses in the Surgical Wards was 'able to take charge of the proper distribution and administrations of medicines, none to help us in taking temperatures in the evening or in the night . . . none in fact who understands what is nursing. The consequence is a confusion in the nursing part of treatment.'[20] On the whole the service rendered to the patients was of a poor quality, the majority of complaints against the nurses being but a reflection of their social standards and the result of lack of good manners, such as disturbing the peace of the wards by shouting, using indecent or obscene language and disrespectful conduct to their superiors. Charges of cruelty to patients were not common though a few nurses were dismissed the service for neglecting to administer medicines to patients, failing to clean them or for outright 'heartlessness' towards them, such as the case of a male nurse at the Central Hospital who, displeased at having to attend constantly on a patient, passed a sheet foul with faeces across the patient's mouth.[21] It is no wonder that at this period (1869) the Comptroller of Charitable Institutions, having despaired of finding suitable individuals for the posts of nurses and matron, declared that nursing and ward administration at the Central Hospital could not be worse and that he even contemplated making a formal representation to His Excellency the Governor to relieve him of all responsibility.[22]

---

[18] *Piano per il regolamento dell'ospedale di Malta*, Malta, 1802.

[19] Letters to Government from 7th January 1859 to 31st December 1861, fol. 125, Medical & Health Archives, Valletta.

[20] New Organisation of the Central Hospital, 1867, fol. 60, Medical & Health Archives, Valletta.

Serious misgivings existed as to the efficiency with which night duty was performed especially at the Central Hospital where the authorities did 'not feel quite satisfied whether stripping and going to bed may not be a practice too often resorted to by nurses' during their night watch.[23] In 1871 the Comptroller complained that night nursing was so inefficient that instances had occurred of patients dying at night 'without being attended to in their last moments by anybody'.[24] A change of heart was slow in coming and as late as 1879 the Comptroller was still writing to the Chief Secretary to Government: 'I have grounds to suspect (that the nurses) are often inconsiderate and at times even cruel in their behaviour towards the patients and other inmates entrusted to their care.'[25] Theft had become an 'established practice'. Nurses had become bold enough to organise a 'system of petty frauds' which the Comptroller was determined to stamp out. It was this state of affairs that induced him to cause all hospital articles and property to be branded with the broad arrow and the initials 'C. I.' for Charitable Institutions.[26]

What the official records call 'amorous mischief' was another source of worry to the hospital administrators. These incidents ranged from the usual innocent love affairs to illicit sexual relations between the nurses, although the latter kind of event was infrequent. It is amusing to observe the feelings of relief expressed by the Comptroller in 1860 when he learned that one of his vampish female nurses was leaving the Central Hospital to get married. 'I recommend most strongly', he wrote to the Chief Secretary to Government, 'the immediate removal of this handsome young woman from a building which does not admit of a complete separation of the sexes.'[27] Wedlock, however, was not without its difficulties. The practice had been introduced of employing married women as attendants and servants, but it was eventually realised that these women were too much occupied with their own children and domestic affairs to acquire useful nursing experience and to attend satisfactorily to the patients entrusted to their care. It was, therefore, decided not to employ married girls; it was also made a condition of employment that all single women were to relinquish their situations on getting married without any claim to retiring allowances as was the procedure with regard to school mistresses of the Primary Schools.[28]

---

[21] Letters to Government from 7th January 1859 to 31st December 1861, fol. 426. Letters to Government from 3rd May 1867 to 5th March 1869, fol. 313, Medical & Health Archives, Valletta.

[22] Register of References to Comptroller of Charitable Institutions, vol. 9, fol. 27, Medical & Health Archives, Valletta.

[23] Letters to Government from 3rd January 1862 to 10th March 1865, fol. 279, Medical & Health Archives, Valletta.

[24] Letters to Government from 5th March 1869 to 31st January 1872, fol. 419, Medical & Health Archives, Valletta.

[25] Letters to Government from 1st July 1878 to 22nd March 1883, fol. 107, Medical & Health Archives, Valletta.

[26] Letters to Government from 7th January 1859 to 31st December 1861, fol. 41. Letters to Government from 3rd January 1862 to 10th March 1865, fol. 388, Medical & Health Archives, Valletta.

Notwithstanding the many difficulties which the Comptroller had to face with regard to the nursing staff, there was a number of good nurses among this 'most troublesome class of public servants' as he once qualified them,[29] but there was always the fear of losing the service of these skilful nurses on account of the low remuneration offered to them.[30] Instances are not lacking where nurses received the praise of the Comptroller for performing their duties with diligence and fidelity. The case of a male attendant is recorded in which he was highly commended for his 'conspicuous goodwill and courage' during the cholera epidemic of 1837. When this disease again visited the Island in 1865, the Comptroller, after declaring himself entirely satisfied with the work of the nurses of the Hospital of Incurables, added: 'When I consider the nature of the services they have to attend to, the time they are obliged to pass in the wards of a hospital containing nothing but foul and foetid disease, and the very small wages they receive, I wonder how they do remain and not seek other employment.'[31] In fact financial reasons militated against the recruitment of skilful and reliable attendants. A male nurse received £25 and a female nurse £15 per annum; a male nurse thus got one third of the salary of a Resident Medical Officer (£75) but as much as the mattress maker and less than the porter (£30) and the cook (£35). The salary of the female nurses was the lowest on the establishment of the hospitals.

The consequence of the low remunerations paid to the female attendants was that the only women who offered themselves for employment were 'some broken down and sick' women who were unable to earn a livelihood in some other occupation while the salary of £17 paid to the Matron of the Hospital of Incurables made it impossible to obtain the services of a 'respectable woman'. Only the occasional mention of the work and abilities of a very few women relieves, momentarily, this gloomy picture. In 1868 the Comptroller was fortunate in engaging a certain Mrs. Catherine Boyle as Matron of the Central Hospital. She was 'well qualified in every respect for duty in a hospital' and judged to be 'a model of a chief nurse and house manager'. She had previously been the Matron of the Military Female Hospital and when this establishment was closed down she started work as a private nurse and midwife.[32] Another capable woman who earned the gratitude of both her patients and the government was Mrs. Fitzgerald Horrocks, who was Matron of Manoel Hospital from 1884 to 1900 and who during the several epidemics of cholera, smallpox and diphtheria had served 'with great courage and untiring patience'.[33] The comfort of the nurse while on duty had as yet attracted very little, if any, attention. An occasion to better it presented itself in 1862 in connection with the project of erecting a new Poor House. When the plans of the building were shown to Miss Florence Nightingale she submitted various suggestions calculated to render the nurse's life in hospital more tolerable. It is true that she was not much in favour, on the whole, of Nurses' Day Rooms and that she held that each staff of nurses ought to dine in their own scullery, but it is equally true that she insisted that the night nurse should have a quiet room to sleep in by day by herself and that the scullery, if used as a Nurses' Day Room, should be comfortable and large enough. She likewise advised the Comptroller of Charitable Institutions not to pinch up the Head Nurse's Room too much since 'these women, whose room is their only home, ought to have space and comfort'. Finally she advocated the provision of water closets for the sole use of the nurses—a suggestion that elicited an astonished 'Why?' from someone who, certainly, was not so advanced in his sanitary ideas as Miss Nightingale.[34] Unfortunately the scheme for the new Poor House failed to materialise at the time and thus an opportunity was lost to improve the working conditions of nurses in our hospitals in the eighteen-sixties.

---

[27] Letters to Government from 3rd January 1859 to 31st December 1861, fols. 66, 68 and 249, Medical & Health Archives, Valletta.

[28] Letters to Government from 1st July 1878 to 22nd March 1883, fol. 63, Medical & Health Archives, Valletta.

[29] Letters to Government from 7th January 1859 to 31st December 1861, fols. 66 and 68, Medical & Health Archives, Valletta.

[30] Letters to Government from 3rd January 1862 to 10th March 1865, fol. 144, Medical & Health Archives, Valletta.

[31] Letters to Government from 16th March 1865 to 3rd May 1867, fol. 94, Medical & Health Archives, Valletta.

It must not be imagined that the low nursing standards described above existed only in Malta; indeed similar conditions prevailed elsewhere in Europe. In some ways the situation was better in Malta than in other countries. The Maltese women employed in our hospitals were certainly ignorant and uncouth but they never touched the same depths of moral degradation reached by some of their colleagues abroad. In England, for instance, the women attending the sick were so uneducated and unrefined that far from capturing the respect and gratitude of society they were looked upon as disreputable servants. They were notoriously addicted to drink. They could not be trusted to behave decently in the company of men and strict supervision had to be enforced to prevent them from swerving from the right path. How very little they could be trusted is amusingly shown by an occurrence connected with Miss Florence Nightingale's visit to Malta in 1854 on her way to the Crimea. A party of her nurses and nuns were allowed to go sight-seeing ashore but it was found expedient to make the nurses walk between the Protestant Sisters in front and the Catholic Nuns behind[35] to save them from falling a prey to the temptations offered by the many soldiers with which Valletta was teeming.

---

[32] Letters to Government from 3rd May 1867 to 5th March 1869, fol. 313, Medical & Health Archives, Valletta.

[33] Letters to Government from 10th April 1895 to 31st March 1903, fol. 545, Medical & Health Archives, Valletta.

[34] Manuscript 396, no pagination, Royal Malta Library.

With Maltese nurses the influence of religion and the absence of alcohol addiction were strong restraining forces; however, Maltese public opinion was no less prejudiced towards female nurses than elsewhere so that, when in 1848 the nursing of sick men was being entrusted to female attendants in some continental hospitals, Maltese doctors did not fail to manifest their disapproval of this innovation. In fact in a report drawn up by members of the 'Società Medica' about the state of the civilian hospitals of the Island they left no doubt that they were strongly set against the introduction of female nurses in the male wards and they openly declared that such an experiment was not to be recommended for Malta even when the nurses were of an advanced age and of excellent morals.[36] When, in 1862, Miss Florence Nightingale suggested to the Comptroller of Charitable Institutions the appointment of a female Head Nurse in the male wards of the new Poor House her proposal met with the uncompromising comment that 'in Malta the sexes must be kept completely separate'.[37] It is only in 1882 that we meet with the solitary instance of a female nurse attending on men patients when an English girl was first brought over from the Mildmay Institute in England to work in the British Seamen's Hospital at Floriana.[38]

The prejudice against the nursing of sick men by women persisted well into the present century. Until recent times the male wards in government hospitals were staffed by male attendants under the supervision of Sisters of Charity. It required the spur of the Second World War to bring about a change in this traditional attitude. The outbreak of war created an immediate and urgent demand for nurses to tend air-raid civilian victims in the various emergency hospitals set up to cope with the casualties. This need was met by the engagement of the female members of the St. John Ambulance Brigade who thus formed the first nucleus of lay women to undertake the nursing of wounded men in government hospitals, although the nursing of sick men by women nurses had long been introduced in the private hospital of the Little Company of Mary (The Blue Sisters Hospital).

---

[35] O'Malley, I. B., *Florence Nightingale 1820–1856*, London, 1931, p. 223.

[36] *Storia della Società Medica d'Incoraggiamento*, Malta, 1845, p. 199.

[37] Manuscript 396, no pagination, Royal Malta Library.

[38] Miscellaneous Letters Issued 1867–1885, fol. 463, Medical & Health Archives, Valletta.

NURSING SCHOOLS

The first to propose a scheme for the training of nurses at the Central Hospital was Dr. T. Bonnici, the Resident Junior Surgeon, in April 1882. His plan met with the prompt approval of the Comptroller of Charitable Institutions and of the Chief Secretary to Government.[39] The course of studies was started but the good results hoped for were not immediately apparent. For many years the attendants remained 'generally illiterate' and had to be taught how to care for the sick by the Sisters of Charity.[40]

Following an increase in the salaries of nurses granted in March 1895, it was expected that a better type of person than had hitherto been employed would come forward to engage as nurse and that instruction and training in nursing would no longer be an impracticable task. To encourage new entrants 'The School for the Training of Nurses' at the Central Hospital was reorganised. Lectures were given three times weekly by the Teacher of Nurses who was also the Director of the School. They were open not only to attendants and midwives in government employment but also to men and women not in the service of the Charitable Institutions. Examinations were conducted by a Board composed of the Visiting Staff of the Central Hospital, the Superintendent of the same hospital and the Teacher of Nurses under the Chairmanship of the Comptroller of Charitable Institutions. The candidates who qualified were granted a certificate of efficiency as nurses and a badge to mark them out as 'Certificated Nurses'.[41] This badge consisted of a red enamelled Geneva Cross on a silver ground.[42] A comprehensive syllabus was prepared, the subjects of study ranging from bed-making, attendance on medical and surgical cases to the use of the clinical thermometer, the various methods of massage, the pre-operative preparation of patients, the use of the catheter and assistance in cases of impending death from chloroform.[43]

Twelve candidates joined the course and eleven of them passed the final examinations showing that they possessed 'a thorough knowledge of all duties with which an efficient nurse is expected to be acquainted'.

---

[39] Letters to Government from 1st July 1878 to 22nd March 1883, fol. 445; and from 23rd March 1883 to 20th April 1888, fol. 124, Medical & Health Archives, Valletta.

[40] Letters to Government from 23rd March 1883 to 20th April 1888, fol. 549, Medical & Health Archives, Valletta.

[41] Letters to Government from 20th April 1888 to 8th April 1895, fols. 858–864, Medical & Health Archives, Valletta.

[42] Letters to Government from 10th April 1895 to 31st March 1903, fol. 154, Medical & Health Archives, Valletta.

[43] Letters to Government from 20th April 1888 to 8th April 1895, fol. 858, Medical & Health Archives, Valletta.

The Comptroller was very optimistic about the future. He envisaged that eventually all the members of the staff of the Central Hospital would be certificated nurses and that attendance on the sick would be 'as effective as can possibly be desired'.[44] As employees from the Poor House, Santo Spirito Hospital and the Lunatic Asylum joined subsequent courses it was decided in January 1898 that in future the designation of 'nurse' would be reserved solely for certificated attendants while those not in possession of the certificate were to be borne on the establishment as 'servants'. More interest was evinced in the training of male than of female attendants as it was decided to entrust the nursing of women patients in the Central Hospital entirely to trained Sisters of Charity and to restrict the work of lay employees to the cleaning of wards and other menial labour. On the male side nursing continued to be performed by certificated male nurses under the supervision of Sisters of Charity.[45] In 1904 at the behest of the Comptroller of Charitable Institutions, Dr. J. S. Galizia published an illustrated guide-book on nursing in the Maltese language for the use of hospital attendants.[46] As a result of these measures a considerable improvement in the nursing position at the Central Hospital was effected by the first decade of the present century[47] but the standards of training and tuition were not raised to keep them in pace with contemporary progress in the field of nursing so that in subsequent years the instruction imparted to candidates was of a superficial kind while the conditions of admission to the course remained of a low educational level. In fact all that was required of candidates, even as late as 1923, was that they were 'in every respect fit to undertake the duties of nurses' and must be able to read Maltese or any other language. The course of lessons, theoretical and practical, lasted only twelve months.[48] The inadequacy of this training was adversely commented upon by the members of the committee appointed to inquire into the administration of the Connaught Hospital in 1934. The syllabus of studies was condemned as being 'too elementary' and the practical training as 'inadequate'. This committee referred to earlier attempts, on the part of the Medical Board, to raise the professional standards of hospital nurses when a proposal was made to institute a local system of registration to enable Maltese nurses to obtain admission to the British Nurses' Association under the Nurses Regulation Act of 1919. On that occasion the Medical Board had shown the necessity for improving the educational and professional qualifications of nurses irrespective of the question of registration and for the institution of a three years' theoretical and practical course of training for the certificate of general nurse. Unfortunately difficulties were encountered over the provision of a suitable Nurses Home close to the Central Hospital for the student-nurses and no further action was taken by government.[49]

---

[44] Letters to Government from 10th April 1895 to 31st March 1903, fol. 154, Medical & Health Archives, Valletta.

[45] *Ibid.*, fols. 244–249, Medical & Health Archives, Valletta.

[46] Galizia, J. S., *Il ctieb ta l'infermier*, Malta, 1904.

[47] Letters to Government from 10th April 1895 to 31st March 1903, fol. 456, Medical & Health Archives, Valletta.

[48] *Malta Government Gazette*, 12th October 1923, p. 807.

A fresh start was made in 1936 with the enactment of Ordinance No. VIII which contemplated the setting up of a register of nurses, the fixing of standards for registration and the drawing up of a scheme for the establishment of a school of nursing. The following year saw the partial implementation of these schemes[50] when arrangements were made for the training of the nursing personnel required for the new general hospital under construction at Gwardamangia and steps were taken for the foundation of a nursing school.[51] The legal instrument for the establishment of reciprocity in connection with the registration of nurses between Malta and other parts of the British Commonwealth and Empire was prepared in January of the same year.[52] In the meantime twelve young ladies were sent to England for training in English hospitals.[53]

The new St. Luke's School for Nurses was opened in October 1938, the first pupils being six young nuns of the Order of St. Vincent de Paul—the community that for many years had been supplying the higher nursing personnel of our hospitals. The outbreak of the Second World War interrupted the activities of the School but the course of studies was resumed in the latter part of 1942.[54] The School was revived in the latter part of 1947[55] when the programme of studies was raised to the level obtaining in nursing schools in the United Kingdom. It was formally inaugurated in January 1948.[56] In 1952 the School received the recognition of the General Nursing Council of England and Wales and nurses registered by the Medical Board of Malta became accepted as State Registered Nurses in England and Wales.[57] There is reciprocity also with Queensland and Victoria in Australia.[58] In spite of these efforts to raise the standards of nursing and to encourage girls to take it up as a career, the position remained unsatisfactory; in fact out of over seven hundred men and women nursing in government hospitals only twenty-six were State Registered Nurses.[59]

STATE DISTRICT NURSES AND HEALTH VISITORS

A very rudimentary form of district nursing existed in Malta during the time of the Order of St. John of Jerusalem; indeed the precursors of the modern district nurse were the '*pitanziere*' or almoners who besides providing food and money grants to the sick and the aged poor also ministered to their ailments under medical supervision. The first suggestion, in modern times, for the institution of district nursing in Malta came from the Public Health Department in 1920. The aims of this service were: (a) to visit and tend the sick poor in their homes and thus relieve the strain on hospital accommodation; (b) to teach and help them to apply properly the treatment prescribed by the doctor; (c) to advise mothers about the care of their own health and the feeding and upbringing of their children; (d) to encourage the people to seek medical advice at the initial stages of disease; and (e) to promote the standards of personal and domestic hygiene among the masses. In the same year applications for the appointment of three District Nurses were issued. Candidates were required to attend a course of lectures and to undergo a period of hospital training at the end of which they were selected by a competitive examination.[60] Three nurses started duties in March 1921 at Zejtun and Axiaq, Qormi and Hamrun. Under the direction and supervision of the District Medical Officers, they attended medical and surgical patients at the Government Dispensaries and also persons suffering from eye diseases. They paid domiciliary visits to the sick poor and to newly confined mothers and they also treated trachomatous children at school. In the first year over three thousand cases were attended in Government Dispensaries, over one thousand home visits were paid and over nine hundred and sixty mothers were seen in the districts mentioned above which had then a population of thirty-eight thousand and over one thousand five hundred births during that year.[61]

---

[49] *Malta Government Gazette Supplement*, 20th September 1934, p. 865.

[50] Debono, P. P., 'Medicine in Malta', *Chestpiece*, 1955, i. 6.

[51] *Report of the Health Conditions of the Maltese Islands for the year 1937*, p. lvii.

[52] *Malta Government Gazette Supplement*, 12th January 1937, p. 1.

[53] *Report on the Health Conditions of the Maltese Islands for the year 1937*, p. lvi.

[54] *Report on the Health Conditions of the Maltese Islands for the year 1938*, pp. ii and li; *for the year 1942*, p. xiii.

[55] *Report on the Health Conditions of the Maltese Islands for the year 1947*, p. lv.

[56] *Report on the Health Conditions of the Maltese Islands for the year 1948*, p. lxxix.

[57] *Times of Malta*, 21st February 1952, p. 8; 10th March 1953, p. 12.

[58] *Times of Malta*, 9th August 1955, p. 8.

[59] *Times of Malta*, 29th December 1959, p. 8.

The service was so well received by the people that it was subsequently extended to cover other districts and the number of nurses was increased to seven by the end of 1923 and to twelve by 1929.[62] Their work at this period was mostly concerned with the treatment of trachomatous children and adults. Since 1942 the title of District Nurse has been changed to that of Health Visitor.[63] Her duties include attendance at the Child Health and the Antenatal Clinics, assisting the District Medical Officer at the Dispensary and treating school children under the supervision of the School Medical Officer.[64]

---

[60] *Malta Government Gazette*, 21st May 1920, p. 329. *Report of the Chief Government Medical Officer for 1920–21*, p. 6.

[61] *Report of the Chief Government Medical Officer for 1921–22*, p. 4. *Malta Government Gazette Supplement*, 7th July 1927, p. 940.

[62] *Report on the Health Conditions of the Maltese Islands during 1929*, p. v.

[63] *Report on the Health Conditions of the Maltese Islands for the year 1942*, p. v.

[64] *Times of Malta*, 4th December 1956, p. 12.

PRIVATE DISTRICT NURSING AND THE MALTA MEMORIAL DISTRICT NURSING ASSOCIATION

Private district nursing in the Maltese Islands owes its origin, indirectly, to the Second World War; indeed the idea of setting up such a service was conceived as a tribute to Malta's war effort. Appeals for funds were launched in the United Kingdom and in Malta during the war years and the Malta Memorial District Nursing Association was founded in September 1945. The service came into operation in February 1947 when six Queen's Nursing Sisters were seconded to Malta by the Queen's Institute of District Nursing in England. Ten Maltese Assistant Nurses, who were previously trained by the Little Company of Mary at St. Julian's, joined the organisation in the same year.[65] Since then Maltese girls have been trained in Britain as State Registered Nurses and District Nurses, the first fully qualified Maltese nurse starting work with the Association in May 1952.[66]

All types of general nursing and midwifery are undertaken. That the Association has filled a long felt need is shown by the number of visits paid by its nurses. From over eleven thousand visits in 1947 the number reached seventy-five thousand in 1958. The organisation depends for its funds on voluntary contributions and a subsidy from the government.[67]

THE SISTERS OF CHARITY

The brotherhood of the Order of St. John of Jerusalem had its counterpart in the Sisterhood of the Hospitaller Nuns. These nuns seem to have had the function, originally, of helping the knights in nursing the sick and in affording hospitality to female pilgrims. Whatever their original purpose we know for certain that these nuns—to-day represented in Malta by the Order of St. Ursula—never did any nursing in Malta apart from caring for babies at the Ursuline Crèche at Sliema.[68]

The first nuns to devote themselves to nursing in Malta were the Sisters of Charity. Their community was founded by Sister Joan Anthide at Besançon, in France, in April 1799. Sister Joan was trained in nursing at the Paris hospital of the Daughters of Charity established by St. Vincent de Paul. By the beginning of the nineteenth century the Sisters of Charity spread from Besançon to Italy and other countries of Europe and, subsequently, also to America and Asia. The earliest proposal to employ nuns in government institutions came from the Governor, the Rt. Hon. Richard More O'Ferrall, at the middle of the last century. The suggestion to acquire the services of the Sisters of Charity was made in 1868 by Mrs. Charlotte Butler, the Superintendent of the Orphan Asylum, when she was compelled to retire from her post on account of ill health. Her proposal was favourably received by the Comptroller of Charitable Institutions who had been experiencing great difficulties in the selection of suitable women for employment in the female division of the Orphan Asylum. Initially it was decided to offer the direction of the Asylum to the Sisters of St. Joseph of the Apparition, but they were unable to accept the offer because they had no qualified nun disposable at that time. Application was then made to the Sisters of Charity, who accepted the charge of the Asylum.[69] They came from Italy and took over the management of the Female Division of the Orphan Asylum on the 1st December 1868.[70]

---

[65] *The Malta Memorial District Nursing Association, First Annual Report*, Malta, 1947, pp. 9–13.

[66] Raven, R.W., 'Three Years of District Nursing in Malta', *Nursing Mirror*, 1950, 491. *Times of Malta*, 3rd May 1952, p. 7.

[67] *Times of Malta*, 17th March 1956, p. 6; 19th March 1959, p. 9.

[68] Mifsud, A., *Knights Hospitallers of the Venerable Tongue of England in Malta*, Malta, 1914, p. 66.

The earliest move to introduce Sisters of Charity in government hospitals came from Dr. G. Xuereb, the Medical Superintendent of the Lunatic Asylum, and the Commissioners of Charity who, moved by the instances of carelessness and breaches of discipline in the Lunatic Asylum, resolved, at their meeting of the 15th December 1869, to submit for the Governor's approval a request for the employment of Sisters of Charity in the Female Division of the Asylum.[71] The appointment of Sisters of Charity in the Orphan Asylum had been attended by complete success, the 'improvement in the morals, discipline and economy of the Female Division of that establishment having been so remarkably conspicuous as to leave no doubt of the great benefit that institution' had derived from their management. In view of this experience the proposal of Dr. G. Xuereb and the Commissioners was favourably entertained both by the Comptroller of Charitable Institutions and by the Governor who, in a minute of the 16th September 1870, authorised the gradual appointment of Sisters of Charity to those situations that fell vacant in all the Charitable Institutions. A number of Italian nuns arrived on the 13th October 1871 and they immediately started work as Matrons, Ward Mistresses, Portresses and Chief Laundresses at the Central Hospital, Lunatic Asylum and Ospizio. In 1873 they were installed at Saura Hospital and in 1878 at Santo Spirito Hospital.[72] The introduction of Sisters of Charity in these hospitals was declared to be 'an admirable innovation' by Sir Penrose Julyan, the then Crown Agent for the Colonies.[73]

In May 1885 it was decided that the nuns engaged in nursing should be certificated nurses. In July of the same year the first qualified nuns, who had been trained at Santo Spirito Hospital of Rome, arrived in Malta.[74] Their main duties consisted in the nursing of patients of both sexes, the proper keeping of instruments, the distribution of the diets, the superintendence of night nurses and the teaching of practical nursing to the attendants. With the aim of enhancing the authority of the Sisters and thus securing their influence over the nurses and other employees, they were accorded an officer status which they still enjoy. It soon became obvious that the Sisters had come to stay. Through the passage of years they proved themselves equal to the task assigned to them. Many Maltese girls joined this religious Order. Some of them, after being trained locally as nurses, have proceeded to the United Kingdom for further training and study for a British nursing qualification.

---

[69] Register of References to the Comptroller of Charitable Institutions, vol. 6, p. 75; vol. 7, pp. 12 and 42, Medical & Health Archives, Valletta.

[70] Letters to Government from 3rd May 1867 to 5th March 1869, fols. 275, 474 and 476, Medical & Health Archives, Valletta.

[71] Letters to Government from 5th March 1869 to 31st January 1872, fol. 230, Medical & Health Archives, Valletta.

[72] Letters to Government from 31st January 1872 to 11th June 1878, fols. 201, 356 and 715, Medical & Health Archives, Valletta.

[73] Julyan, P. G., *Report on the Civil Establishments of Malta*, London, 1880, p. 26.

THE LITTLE COMPANY OF MARY (BLUE SISTERS)

The founding of the Little Company of Mary by Mary Potter took place in April 1877 in the little village of Hyson Green about two miles from Nottingham. Her aim was to provide a community of scientifically trained religious nurses. By 1894 they had established a hospital in Rome near Porta Pia and in the same year they came to Malta at the invitation of Mgr. Pietro Pace, Archbishop of Malta. A small house was acquired for them in Cathedral Street, Sliema, to serve as a convent for the four Sisters who formed the first nucleus of the Little Company of Mary in Malta. For the first few years of their residence here they were engaged in out-nursing until a larger house, known as Casa Leone XIII, was officially opened early in 1901. The ground floor was converted into a convent while the upper floor was occupied as a small hospital. In 1910 Mrs. Emilia Zammit Clapp and her sister Miss Mary Zammit acquired a piece of ground adjoining Casa Leone XIII and on it erected the Zammit Clapp Hospital in memory of Henry Lyman Clapp, the American husband of Emilia. On the 23rd June 1911 they donated the new hospital to the Government in commemoration of the coronation of Their Majesties King George V and Queen Mary.[75]

During the First World War the hospital and part of Casa Leone XIII were converted into a military hospital with beds for one hundred and fifty patients. The Sisters and their helpers gained the admiration of the military authorities who, in a report submitted to His Excellency the Governor, declared: 'To the Mother Superior and her staff the greatest credit is due for the successful working of the hospital and in honour of the self-denying services of this band of ladies it would be impossible to say too much.'[76] They again played as valuable a part during the Second

---

[74] Letters to Government from 23rd March 1883 to 20th April 1888, fol. 277; and from 10th April 1895 to 31st March 1903, fol. 163, Medical & Health Archives, Valletta.

[75] *Malta Government Gazette Supplement*, 12th April 1912.

[76] Healy, E., *The Life of Mother Mary Potter*, London, 1935. Galea, A. M., *Il Carità f'Malta u Ghaudex*, 1912, p. 83.

World War when they nursed civilian casualties. Their peacetime work in nursing private medical, surgical and maternity cases is no less worthy.

They first started a nursing school in 1922 but its activities were interrupted by the outbreak of the Second World War. The school was reopened and reorganised in 1950 and the Mary Potter School of Nursing became recognised as a training school by the General Nursing Council of England and Wales.[77]

THE DOMINICAN SISTERS

In 1885 Miss Carolina Cauchi, encouraged by the Bishop of Gozo, Mgr. Pietro Pace, built a convent in Rabat, Gozo, for the convenience of some nuns who were engaged in domiciliary nursing. From them sprung the nuns of St. Dominic to whom the government later entrusted the care of the patients in the Gozo lazaretto[78] after they had received their training at the Gozo general hospital under the direction of the medical officers and Sisters of Charity in 1900.[79]

Their first nursing home in Malta—known as St. Peter's Home—was opened in 1919 in a large house at Lija. As the need for more beds became imperative a hospital for one hundred beds was erected at 'Tal Mirakli' near Attard. The foundation stone of the new building, named after St. Catherine of Siena, was laid in June 1953. The hospital was officially opened on the 12th April 1959, the old house at Lija being adapted as a home for old people.[80]

THE ST. JOHN AMBULANCE BRIGADE

In spite of its name, the St. John Ambulance Brigade has only an indirect and remote connection with the Sovereign and Military Order of St. John of Jerusalem that once ruled over Malta. The English *langue* had formed one of the original seven *langues* into which the Order was divided in the fourteenth century. The English knights played an important part in the affairs of the Order until their *langue* was suppressed in England by King Henry VIII in 1540; thereafter the number of English knights in the Order became so insignificant that twenty-five years later there was only one English knight taking part in the Siege of Malta of 1565.

The English *langue* was revived in England, independently of the Sovereign and Military Order of St. John of Jerusalem, under the title of 'The Grand Priory in the British Realm of the Venerable Order of the Hospital of St. John of Jerusalem' in 1826. Nursing became a prominent feature of its activities only in 1878 when the Ambulance Department, later known as the St. John Ambulance Association, was formed. The aim of this body was the provision of transport facilities for the wounded. The St. John Ambulance Brigade is an offshoot of this Association, its distinguishing feature being that it is a voluntary organisation for giving first-aid to the public and for maintaining a body of civilians trained in ambulance work and nursing duties.

---

[77] Personal communication, Mother M. Kevin, 24th August 1952.

[78] Galea, A. M., *op. cit.*, p. 77.

[79] Letters to Government from 10th April 1895 to 31st March 1903, fol. 572. Reference Book No. 32, fols. 204 and 218, Medical & Health Archives, Valletta.

[80] *Times of Malta*, 16th August 1954, p. 7; 14th June 1958, p. 7; 30th June 1958, p. 11; 14th April 1959, p. 9.

The charitable work of the St. John Ambulance Association (1878) was introduced in Malta by Lady Houlton, the wife of Sir Victor, the Chief Secretary to the government at the time of the insurrection at Alexandria during the Egyptian War in 1882.[81] The Malta branch of the Association was reorganised in 1907 but the St. John Ambulance Brigade was not formed until the 18th September 1909, the first unit being the Valletta Ambulance Division.[82] At the beginning many difficulties had to be faced and overcome as people were not quick to appreciate the benefit of a knowledge of first-aid, but thanks to the efforts of its founders the movement grew so that by 1911 representatives of the Malta Corps were able to take part in the Coronation festivities of Their Majesties King George V and Queen Mary in London.

When, on the 25th November 1908, the S.S. *Sardinia* burst into flames outside the Grand Harbour with the loss of one hundred and twelve lives, the St. John nurses hastened to the Custom House which was promptly turned into an emergency hospital for the care of the survivors. The zeal of the nurses in tending the injured earned them the praise of the medical profession and the thanks of the government. The same enthusiastic response was forthcoming in the same year when a severe earthquake struck Messina in Sicily and when thirty-one members of the Brigade volunteered for service at the scene of the disaster at the call of His Excellency the Governor.[83] A few years later, during the First World War, over one hundred ambulance members and forty surgeons were attached to the Naval and Military Hospitals in Malta. In November 1915 members went overseas to serve with Maltese army units at Mudros, Macedonia and other places.

In the years following the First World War the Brigade tendered its help on many public occasions such as religious festivities and civil and military gatherings. On the outbreak of the Second World War the Brigade was mobilised and its nurses were posted to the various emergency hospitals set up for the treatment of civilian casualties; its members also helped in Victory Kitchens and other government departments. Four Voluntary Aid Detachments were formed. They served at the Mtarfa Hospital, and later on in various military camps in Italy, earning a high tribute for their devotion to duty from Field-Marshal H. R. Alexander. The Brigade was reorganised in 1945 and to-day it numbers over a thousand members in the Maltese Islands including the Malta Police Ambulance Corps (1945) and an Ambulance Corps in the Naval Base.[84]

---

[81] Bedford, W. K. R., *The Order of the Hospital of St. John of Jerusalem*, London, 1902, p. 142.

[82] *Times of Malta*, 9th April 1959, p. 5.

[83] *Annual Report of the Malta Centre for the Year Ending September 30th 1909*, Malta, n.d., p. 9.

A first-aid booklet in Maltese was published in 1916 by Col. R. Samut under the auspices of the Brigade. A fourth edition was printed in 1943.[85]

---

[84] *The St. John Ambulance Brigade, Malta District 1909–1949*, Malta, 1949, pp. 7 and 19–27.

[85] Casolani, R. L., *L-ewwel ghajnuna lil min ikorri*, Malta, 1943.

CHAPTER 44

Midwifery

No facilities were provided by the State for the teaching of the theory and practice of obstetrics to midwives until the beginning of the nineteenth century. An attempt had been made in 1772 by a surgeon employed in the navy of the Order of St. John of Jerusalem to start a course of instruction for midwives. This surgeon, Dr. Giuseppe Antonio Creni, suggested delivering lectures once a month, or more often if necessary, not only to prospective midwives but also to those who were already in practice. He also proposed giving practical demonstrations on an anatomical model which he had acquired from Bologna where he had undergone his surgical training. He submitted his request to the Grandmaster to whom he remarked that, on account of the unskilfulness of midwives in the exercise of their art, they not infrequently caused injury and sometimes death to both mother and baby. Dr. Creni's hopes, however, never materialised because, according to one of the Senior Physicians of the Holy Infirmary, the midwives were so ignorant that they could in no way derive any profit from instruction. Indeed, apart from the fact that they did not understand Italian, which was then the official language of Malta, they did not even possess a knowledge of the fundamental principles of human anatomy or of the technical terms used in their art. Under these circumstances, in the opinion of Dr. G. Imbert, to whom Dr. Creni's request had been passed for advice by the Grandmaster, lectures to midwives could only be 'scandalous and full of inconveniences'.[1]

This deplorable state of affairs was not unique to Malta. As late as the mid-nineteenth century the training of midwives constituted one of the pressing medico-social problems with which most European countries were contending. Some progress had been achieved in France, Austria and Prussia but in England no special arrangements had yet been made for training midwives though pupils were being accepted for instruction at Guy's and at King's College hospitals. In Malta official initiative for the teaching of midwives dates back to 1802 when a Teacher of Obstetrics was appointed at the Women's Hospital at Valletta.[2] This school was abolished in later years with a consequent deterioration in the practice of midwifery. On the 4th August 1853 the Commissioners of Charity deplored the fact that 'competent midwives were rapidly diminishing and that ignorant women were assuming the duties to the serious detriment of the poor population'. They ascribed this circumstance to the abolition of the School for Midwives and recommended to the government the re-establishment of this school together with the enactment of legal measures to prevent women from exercising the profession of midwife unless they were furnished with the appropriate certificate and qualifications. In order not to burden the government with an increased expenditure they suggested that the candidates should pay five shillings monthly to the Comptroller of Contracts and that they should perform the duties of extra-servants while residing at the hospital for instruction.[3] The school was eventually reopened but clinical material was so scarce that in September 1854 the Junior Physician who was detailed to teach the midwives had to make use of a girl of ten years from the medical wards for demonstration purposes—to the great consternation of the Chairman of the Board of the Commissioners of Charity who threatened to report similar future occurrences to His Excellency the Governor.

---

[1] Manuscript in the possession of the writer.

[2] *Piano per il regolamento dell'Ospedale di Malta*, Malta, 1802, p. 14.

Fresh arrangements were made in 1855 to put the School of Midwifery at the Central Hospital on a sure foundation but it was realised from the very start that the organisers had to face obstacles arising mainly from prejudices which were 'not confined simply to the poor'. For this reason the future teacher was warned by the Inspector of Charitable Institutions to be careful 'not to arouse feelings of opposition and prejudices unless absolutely necessary'.[4] In spite of this prudence, however, considerable difficulties continued to be encountered 'owing to scruples which interfered with the experimental course and the absence of any sufficient anatomical models'.[5] It is not surprising, therefore, that at this period, and for many years afterwards, midwives were 'mere attendants capable only of uttering ejaculations and prayers, quite of their own making, while stretching forth their arms to receive a foetus naturally expelled from the womb, an assistance which any individual knows how to afford'.[6]

In a further effort to create a more efficient class of midwives suggestions were made in 1868 to establish a School of Practical Midwifery at the Central Hospital under the direction of the Senior Surgeon and Accoucheur. On the 5th March 1869 the Comptroller of Charitable Institutions submitted a draft of the rules of the proposed school to His Excellency the Governor. He contemplated the selection of a more respectable type of student, the teaching of both the theory and practice of midwifery, a qualifying examination by a properly constituted authority and the taking of an oath by the students before being allowed to enter the profession. The provision of properly trained midwives was especially needed in such a prolific place as Malta where owing to the 'proverbial' modesty of Maltese women the presence of an accoucheur in the labour room was only tolerated in cases of extreme difficulty and danger.[7] It was, therefore, hoped that as the number of adequately trained midwives increased one or two of them would be assigned to each police district.[8] On the 25th June 1869 a government notice invited applications for registration as students in the course of midwifery. In his endeavour to give the scheme the widest publicity the Comptroller of Charitable Institutions availed himself of the assistance of the parish priests, syndics and police of the two islands to inform the public of the prospective course of studies.

---

[3] Commissioners of Charity. Letters Issued from 15th May 1851 to 4th November 1857, fols. 39, 103 and 137, Medical & Health Archives, Valletta.

[4] Commissioners of Charity. Inspector's Letter Book from 6th May 1851 to 3rd October 1855, fol. 279, Medical & Health Archives, Valletta.

[5] Despatch of H.E. the Governor to Secretary of State of 18th January 1855.

[6] Letters to Government from 3rd May 1867 to 5th March 1869, fol. 560, Medical & Health Archives, Valletta.

The school was opened on the 24th November 1869, the lectures being delivered by Professor S. L. Pisani, the Senior Surgeon and Accoucheur of the Central Hospital. Lectures were given twice a week in English and Italian. They covered the principles of midwifery, of the nursing and treatment of puerperal diseases and of the care of infants. During this first course there were many opportunities for the students to assist at normal deliveries but they were unable to attend any pathological labours for want of cases.[9] Of the eight students who joined the course, three were Englishwomen married to army sergeants. Two of the Maltese girls were later persuaded to abandon the course owing to their low educational standards. The course lasted sixteen months but it was proposed to extend it to two years and to commence it in October of every second year. On the whole the results of the first course were considered to be most satisfactory by the hospital authorities and 'even beyond expectation'.[10]

A second course was announced on the 21st July 1871. The illiteracy of the applicants, however, constituted a serious stumbling block to the further progress of the school. The pupils came from the lowest strata of the population and lacked the most elementary schooling. In fact, at the first course, a far greater number of women had presented themselves for admission than were accepted, the reason for their rejection being 'their utter deficiency in the accomplishments indispensably required to comprehend the lectures'. The situation did not improve in subsequent years so that the lecturer had to limit his teaching to a few short precepts in Maltese. After assisting passively at a few deliveries the pupils underwent an oral examination. No practical tests were given though a practical examination was added later on.

---

[7] Letters to Government from 3rd May 1867 to 5th March 1869, fol. 558, Medical & Health Archives, Valletta.

[8] *Ibid.*, fols. 253, 495 and 557.

[9] Letters to Government from 5th March 1869 to 31st January 1872, fol. 339, Medical & Health Archives, Valletta.

[10] *Ibid.*, fol. 445.

The medical profession was very loud in its condemnation of this state of things. By way of remedy it was suggested that pupils should possess a primary education and a working knowledge of Italian to enable them to read and follow a manual in obstetrics; and that suitable candidates should be sought for among the inmates of orphanages and the girls attending the elementary schools between the ages of eighteen and twenty.[11] The medical journal *Il Barth* stated openly that the midwives were a grossly ignorant set who either failed to call the obstetrician at the right moment or else attempted to hasten the delivery of the baby causing extensive perineal lacerations to the mother. Others even dared to pose as doctors prescribing medicines for menstrual pains and other complaints and also pretending to correct malpositions of the womb—and yet they were not at all able to recognise the presenting part of the foetus.[12] To make matters worse the course of 1876 had to be suspended for want of adequate accommodation for the student midwives at the Central Hospital, as the rooms previously occupied by them were made over to the University students when a clinical course in obstetrics was instituted for the latter at the hospital.[13] The course was resumed in the following year and in October 1878 eight students were ready to undergo their final examinations. Subsequent courses were extended over a period of two years.[14]

In October 1873 a request by Prof. S. L. Pisani had been submitted to the government for the printing of his lectures in book form for distribution to his students at the end of the course[15] but it was not until ten years later that his *Ktieb il Qabla* was published.[16] To ensure adequate facilities for the practical training of the pupils 'an artificial body' was purchased by the government in 1885 at the cost of ten pounds.[17] In 1886 it was decided that only persons between twenty and thirty years were to be accepted as students and since the lectures were being given in Maltese applicants had to be able to read this language.[18] In 1895 students were also required to be able to write and to possess a fair knowledge of the first four rules of arithmetic.[19] Later on it was made obligatory for the students to attend also the course for Hospital Attendants at the Central Hospital and to pass the prescribed examinations in general nursing before they were admitted to the theoretical examination in midwifery.[20]

---

[11] *Il Barth*, 2nd December 1871, p. 83.

[12] *Ibid.*, 5th September 1871, p. 42; 22nd March 1873, p. 261.

[13] Letters to Government of 31st January 1872 to 11th June 1878, fol. 587, Medical & Health Archives, Valletta.

[14] Letters to Government from 1st July 1878 to 22nd March 1883, fols. 31 and 283, Medical & Health Archives, Valletta.

[15] Letters to Government from 31st January 1872 to 11th June 1878, fol. 249, Medical & Health Archives, Valletta.

[16] Pisani, S. L., *Ktieb il qabla*, Malta, 1883.

[17] *Malta Government Gazette*, 1st June 1885, p. 224.

[18] Letters to Government from 23rd March 1883 to 20th April 1888, fol. 400, Medical & Health Archives, Valletta.

[19] Letters to Government 10th April 1895 to 31st March 1903, fol. 54, Medical & Health Archives, Valletta.

One of the long-felt needs of the British garrison was the provision of English-speaking midwives for the women of the military personnel stationed in Malta. Towards the end of the century only one or two midwives were to be found among the wives of British soldiers with the result that they were unable to meet the requirements of the families of the ten thousand troops then in the Island. The consequence was that soldiers' wives were left to the mercy and monopoly of the one or two English midwives unconnected with the garrison who, being burdened with work, could only give insufficient attention and incomplete assistance. To obviate these difficulties Lady Sym Fremantle, the wife of the Governor, raised the question of training the wives of soldiers in the practice of midwifery to enable each regiment to have its own 'professional woman' and thus be in a position to assist one another with adequate care and nursing. The result of her endeavours was that in 1896 a special class—the Military Midwives Class—was held for English speaking women and an English translation of Prof. G. B. Schembri's Maltese book on practical midwifery was printed under the title of *The Midwife's Guide Book*.[21] Between this year and the end of 1902 twenty-two British women had attended the course and qualified as midwives.[22]

At the beginning of the present century Dr. S. Grech, the Professor of Midwifery and Gynaecology, pressed for a reform of the school with a view to raising its standards of training but the Comptroller of Charitable Institutions saw no need for change as he considered that the educational requirements demanded of applicants, i.e. the ability to read and write Maltese, a fair knowledge of elementary arithmetic and a good moral character, were quite adequate.[23] The school was finally placed on a sound footing in 1915 when the course of midwifery was instituted under the auspices of the University. The course led to the Diploma of Midwife. The Professor of Midwifery was in charge of the studies which lasted two years. Candidates were admitted to the course only after having attended a preliminary period of training in elementary anatomy, physiology and theoretical nursing at the Central Hospital. The programme of studies was sanctioned by the Special Council of the Faculty of Medicine and the annual examinations were conducted by an Examining Board composed of the Professor and of two medical men selected by the Special Council.[24] Candidates from the Island of Gozo experienced great difficulties in attending to their studies at Malta. To overcome this obstacle a course for midwives was given in 1937 at Victoria Hospital, Gozo, where the number of practising midwives had dwindled to almost vanishing point.[25] The University ceased to conduct the course of Midwifery in 1946 when it was taken over by the Medical and Health Department.[26]

---

[20] *Malta Government Gazette*, 15th February 1907, p. 181.

[21] Schembri, G. B., *The Midwife's Guide Book*, Malta, 1896. Schembri, G. B., *Taghlim ghal-istudenti ta l-iskola tal kwiebel ta l-Isptar Centrali*, Malta, 1897.

[22] Letters to Government from 10th April 1895 to 31st March 1903, fols. 100, 185 and 414, Medical & Health Archives, Valletta.

[23] Letters to Government from 1st April 1903 to 10th April 1909, fol. 213, Medical & Health Archives, Valletta.

[24] *Malta Government Gazette Supplement*, 26th June 1915, p. liv.

STATE CONTROL OF THE PRACTICE OF MIDWIFERY

During the time of the Order of St. John of Jerusalem the practice of midwifery was regulated by Protomedical decrees issued from time to time as those of the 2nd August 1624, 19th June 1662 and 24th September 1722.[27] These enactments were later incorporated in the legal code published in 1724.[28] No woman was allowed to exercise the profession of midwife unless she had been examined and approved by the physician-in-chief and granted the requisite licence which she had to submit for inspection to every successive physician-in-chief soon after his appointment to office. An official register of approved midwives was deposited in the Grand Court. As the use of abortifacients was prohibited by law, midwives guilty of this offence incurred the penalty of a whipping and were condemned to banishment from the Island at the Grandmaster's pleasure. These provisions were renewed by subsequent decrees and by the de Rohan Code of 1784. They remained in force well into the nineteenth century under British rule until they were superseded by Chapter XIV of the Police Laws.[29] One of the earliest licences for the practice of the 'profession of midwife' during the British connection was issued in July 1813.[30]

By the mid-century the granting of a warrant to practice midwifery was made contingent on the fulfilment of certain conditions laid down by the Medical Board. Attendance at forty cases of labour was made compulsory—a circumstance which in practice meant at least two years' training at the Central Hospital before a warrant could be issued. This ruling was strictly adhered to and not even the highest authority in the land dared to depart from it. Thus when in February 1865 the wife of a British soldier petitioned to be exempted from attending the full number of confinements prescribed by the regulations on account of the premature departure of her husband's regiment from the Island, His Excellency the Governor, Sir Henry Storks, declined to grant her request.

---

[25] *Report on the Health Conditions of the Maltese Islands for the year 1937*, p. lvii; *for the year 1938*, p. li. *Malta Government Gazette*, 15th October 1937, p. 843.

[26] *Report on the Health Conditions of the Maltese Islands for the year 1945*, p. xxvi; *for the year 1946*, p. xxxiv.

[27] Manuscript 2, fol. 601; Manuscript 439, fol. 422; Manuscript 429 (vol. i), fol. 20, Royal Malta Library.

[28] *Leggi e costituzioni prammaticali*, Malta, 1724.

[29] *Del Dritto Municipale di Malta*, Malta, 1784, p. 296. *Collezione di bandi*, Malta, 1840, pp. 41–42. *Leggi di polizia*, Malta, 1872, p. 4.

[30] *Malta Government Gazette*, 21st July 1813, p. 321.

'If', he argued, 'the Medical Board recommended petitioner for a warrant before she has completed the course considered necessary to qualify for a midwife and if I gave her a warrant and a patient died under her treatment, what would be said then? If I gave this woman a warrant under the circumstances, why not to another? And if to all, of what use are laws and regulations? Petitioner may have received a good education which is evident from the petition, which I suppose is written by herself, but that won't qualify her for a midwife.'[31]

A set of regulations to be observed by midwives was published by the government in 1899.[32] These regulations specified the instruments which a midwife was obliged to carry with her when attending a woman in labour and laid down rules concerning the cleanliness and disinfection of the lying-in room, the patient and the midwife herself. She was warned to perform 'vaginal touch as seldom as possible' and not to attempt the dilatation of the orifice of the vulva artificially. Emphasis was also made on the importance of seeing that the womb was fully contracted after parturition. The midwife was further enjoined to visit the patient daily for the first eight days after labour to be able to follow the clinical progress of the patient's puerperium and to call for a doctor in case of suspicious lochia. As regards the new-born baby, the midwife was obliged to bathe its eyelids with boracic acid lotion and to explain to the mother the importance of sending at once for a doctor if the baby's eyes showed any redness or irritation.

Detailed and comprehensive provisions for the conduct of the practice of midwifery were again enacted by the Second Sanitary Law which received the assent of the Governor in May 1901.[33] In virtue of this law a licence had to be obtained from the Head of the Government before a woman became entitled to enter practice as a midwife; and as a prerequisite she had to be in possession of the diploma of a recognised midwifery school. She was debarred from using surgical instruments and from performing any manual operation on the child while it was still in the mother's womb. In case the mother developed puerperal fever, the midwife had to report the occurrence to the District Medical Officer and to abstain from practising for the next five days during which period she, together with her instruments and her clothing, was subjected to disinfection as directed by the Superintendent of Public Health. These legal provisions, with some modifications, remain in force.[34]

---

[31] Register of References to the Comptroller of Charitable Institutions, vol. i, fol. 78, Medical & Health Archives, Valletta.

[32] *Malta Government Gazette*, 7th August 1899.

[33] *Malta Government Gazette*, 30th May and 2nd July 1901.

[34] Medical and Kindred Professions Ordinance, Chapter 51 of the *Revised Edition of the Laws of Malta*, Malta, 1942.

PART VIII

FROM PRIMITIVE BELIEFS TO SCIENTIFIC THOUGHT

CHAPTER 45

Medical Folklore

THE impact of disease and death on the imagination and on the religious beliefs of the Maltese has given rise to many customs and usages several of which still survive. These folk practices originated a long time ago when the understanding of disease was still very hazy and its treatment ineffective. The remedies devised by the people to ward off or cure illness comprise purely religious ceremonies, magico-religious practices and folk medicine.

RELIGIOUS CEREMONIES

Following the introduction and spread of Christianity in Malta in Roman times (A.D. 60), the religious element assumed a prominent part in the life of the people. It coloured their views about the nature of disease, which they regarded as a supernatural visitation especially when illness struck in epidemic proportions. These occasions provided the ideal atmosphere for the intensification of the religious feelings of the people who, faced with the helplessness of human measures against the ravages of disease, had nothing to fall back on except their faith in a protecting divine power. The scourge that has, more than anything else, given rise to these manifestations of faith has been plague. In almost every visitation of this disease up to 1813, the invocation of the protection of God and of the saints constituted one of the main weapons of defence against the onslaught of the malady. Thus we find that nearly all plague epidemics were followed by the institution of annual votive processions, the building of chapels or shrines and the dedication of altars to one or more saint protectors. It was in this manner that the veneration of St. Basilius, St. Sebastian, St. Nicholas, St. Roque and St. Rosalia was introduced in the Island. In thanksgiving for the liberation from the plague of 1501, the annual celebration of a votive high mass on the 20th January was established at the church of St. Sebastian at Rabat.[1] One of the earliest processions, that still took place up to quite recent times on the first Wednesday after Easter, was that in honour of St. Gregory, whose name was invoked in epidemics. It is not known exactly when and how this procession originated but according to a very old tradition it was first held in fulfilment of a vow to the saint through whose intercession the Island was delivered from the plague of

---

[1] Ferres, A., *Descrizione storica delle chiese di Malta e Gozo*, Malta, 1866, p. 87.

1519. To this pestilence, also, churches dedicated to St. Sebastian owed their foundation at Rabat and Birgu.[2]

At Mqabba the epidemic of 1523 gave origin to a votive procession on the first of January during which the church of St. Sebastian and St. Roque was visited. Originally this church had been dedicated to the Blessed Virgin but after 1523 the portraits of the two saints named above were incorporated in the altar-piece of the Madonna.[3] To commemorate the cessation of the plague of 1592–93, the church of St. Roque was built at Valletta in 1593 at the expense of the municipality. Other churches dedicated to the same saint were erected at Birkirkara, Zebbug, Balzan and Pietà. This last church was enlarged in later years and re-dedicated to Our Lady of Sorrows. Provision was also made for the holding of a procession and of an annual horse and donkey race on the saint's feast day in August. The race, originally run along the waterfront of Pietà, now takes place at Rabat.

At the end of the plague of 1675–76 the Order's Government built a chapel at Floriana dedicated to the Blessed Virgin on the site of an earlier one erected by the knight Martino de Sarria in 1585. It was adorned with four paintings by Mattia Preti portraying St. Sebastian, St. Roque, St. Nicholas and St. Rosalia. This last saint was added to the other plague protectors in 1674 when her relic was sent over from Palermo (Sicily) as a gift to the Grandmaster.[4] The chapel is visited processionally on the feast of the Immaculate Conception of Our Lady. Other votive processions in connection with this epidemic were instituted at Rabat and Mellieha.[5] The church of St. Roque at Valletta was rebuilt by the municipality of the city under the added protection of St. Angelo while several other churches and wayside shrines were dedicated to St. Roque, St. Sebastian and St. Michael in various towns and villages. A small oil painting of St. Roque is to be seen in Valletta under the arcades of Piazza Tesoreria where it was set up by the inhabitants of that part of the city in thanksgiving for having escaped the infection. The intercession of St. George, the patron saint of Gozo, was sought by the Gozitans during this plague from which they remained immune. A temple is dedicated to this saint at Rabat, Gozo.[6] Elaborate but macabre burial customs, originating in medieval times, had persisted well into the seventeenth century when they were suddenly swept away by this epidemic, during which funerals were prohibited.[7] The old customs were never resumed.

The plague of 1813 is commemorated in Senglea by a procession on the first Sunday after the Octave of Corpus Domini in which the statue of St. Roque is carried through the streets of the town. A marble statue of the Blessed Virgin in Victory Street also recalls that pestilence. At Rabat this epidemic gave rise to a procession from the Cathedral of Mdina to the churches of St. Paul and of St. Sebastian while at Gozo the relic of St. Ursula is carried processionally on the third Sunday of September from the Cathedral to the church of St. George.[8] The devotion towards Our Lady of Good Health, whose image is venerated at St. Francis Church, Rabat, dates from this plague.[9] The Franciscan Friars vowed to Our Lady that they would celebrate a feast in her honour in the month of May if they were saved from the pestilence. In fulfilment of this vow they acquired a painting of the Holy Virgin which soon became the centre of a widespread devotion among the sick and earned the title of Our Lady of Good Health. Not only the people and the clergy commemorated the cessation of this plague by religious manifestations but even the British Governor, Sir Thomas Maitland, ordered the dedication of the 29th February 1814 'to a solemn act of prayer and of thanksgiving to Almighty God' and the singing of a 'Te Deum' in all the churches of the Island. The Governor attended this ceremony at St. John Cathedral but as he was a non-Catholic the occasion called for delicate diplomatic handling. Although the Order of St. John of Jerusalem had left the Island fifteen years previously, the Cathedral still maintained the throne where the Grandmaster used to sit during official ceremonies. On the occasion of the 'Te Deum' of 1814 the Bishop asked Sir Thomas Maitland to occupy the throne, but this invitation embarrassed the Governor for he feared that by taking part in a Catholic ceremony as the representative of the King he risked incurring the displeasure of the Protestants in England, while if he refused the Bishop's offer he risked offending the sentiments of the Maltese. Eventually he succeeded in solving the question to the satisfaction of both sides. He declined to occupy the throne on the grounds that being only the servant of the King he did not feel entitled to take the seat on the throne but he proposed placing the Royal Arms of the United Kingdom on the throne as a symbol of the presence of the Sovereign. This was done and the usage established on that occasion survives to this day.

---

[2] Manuscript 1146, vol. i, fol. 226t, Royal Malta Library.

[3] Ferres, A., *op. cit.*, pp. 454 and 458.

[4] Dal Pozzo, B., *Historia della Sacra Religione Militare di San Giovanni*, Venezia, 1715, p. 448.

[5] Ferres, A., *op. cit.*, pp. 88 and 527.

[6] *Times of Malta*, 17th July 1954.

[7] De Boisgelin, L., *Ancient and Modern Malta*, London, 1805, vol. i, p. 86.

Following the proclamation of a free pratique for Malta and Gozo, a procession from St. Paul's church (Valletta) to St. Publius church at Floriana was held on the 19th September 1814. The statue and the relic of St. Paul were carried triumphantly through the streets which were lined with troops amid the ringing of bells and the firing of artillery.[10]

A painting in the church of St. Anthony Abbot at Xaghra, Gozo, shows the inhabitants of that village encamped under tents during the plague of 1813 while at the Sanctuary of Our Lady of Graces at Zabbar there is a picture figuring Our Lady with St. Roque and St. Sebastian and a dead woman suckling a live baby. This painting is said to have

[8] Ferres, A., *op. cit.*, pp. 87 and 547.

[9] Anon., *Il Madonna tas-Sahha*, Malta, 1950, p. 27.

[10] *Malta Government Gazette*, 2nd February 1814, p. 55; 21st September 1814, p. 193.

been offered by a devotee who, when an infant, was found during that epidemic at his dead mother's breast.[11] A votive canvas at Tal Herba Sanctuary at Birkirkara shows the old Ospizio at the time of the epidemic with an attendant on a wall taking aim with his gun at a cat. This picture has the images of the Ecce Homo, the Madonna, St. Roque and St. Rosalia. At the Minsija Sanctuary, in the same district, is another oil painting showing the dead-cart passing by a group of kneeling people with Floriana in the background. Other canvases portraying the saint protectors of plague abound in our churches among which may be mentioned those of St. Lawrence at Birgu, the Mosta parish church and the Chapel of Auvergne in St. John Co-Cathedral.

The theme of disease has inspired several other altar-pieces. Saints Cosmas and Damian, the Arabian physicians, figure in canvases in the sacristy of St. John Co-Cathedral, in the chapel of St. Luke's Hospital and in the church of the Minor Conventuals at Valletta where a sodality of physicians and surgeons was founded on the 10th October 1635 under the protection of the two saints.[12] St. Paul healing the sick and the father of St. Publius forms the subject of two paintings in the choir of St. Paul's Church at Valletta and of another canvas in the Mosta parish church while a painting in the church of the Minor Observants at Valletta represents him in the act of visiting the ailing St. Trophimus. Christ healing the sick is depicted in a picture in St. Dominic's church at Valletta.

St. Blaise, a fourth-century bishop and physician, is traditionally reputed to have saved a boy from choking and his aid is invoked in throat diseases especially of children. Evidence of his early veneration in Malta is provided by a painting in the crypt of St. Agatha at Rabat dating from the fifth century.[13] In a votive altar-piece in the possession of the Carmelite Friars of Valletta, St. Blaise is depicted in the act of shielding a little girl. In the same picture are shown the Blessed Virgin with two saints and a sick man with a woman praying by his bed. Another painting of the saint, executed on wood in 1530, is preserved in the Cathedral Museum at Mdina.[14] A relic, consisting of a piece of bone from the saint's arm, is venerated in this cathedral where on the saint's feast day on the 3rd February small loaves of bread, oil, wine and fruits are blessed and distributed to those suffering from throat diseases.[15] The same custom used to be observed in the churches of St. John and of Our Lady of Mount Carmel in Valletta where relics of the saint were preserved.[16] A few chapels have been dedicated to him while two localities, one in Malta and another in Gozo, bear his name.[17]

---

[11] Zarb, G., *Is-santwarju tal Madonna tal Grazzi*, Malta, 1946, p. 26.

[12] Ferres, A., *op. cit.*, p. 226.

[13] Caruana, A. A., *The Crypt of St. Agatha*, Malta, 1899, pp. 3 and 13.

[14] Anon., *Il Madonna tas-Sahha*, Malta, 1950, p. 13.

[15] Vella, V., *Il medicina ghal mard tal griezem*, Malta, n.d., p. 12.

[16] Manuscript 142 E, fol. 292, Royal Malta Library.

[17] Cassar-Pullicino, J., 'Maltese Customs and Beliefs in 1575', *Folklore*, 1951, lxii. 399.

St. Blaise's help was sought by women in childbirth who prayed to him 'to enlarge the opening and reduce the size of the baby's head' to facilitate delivery. The '*Madonna tal hlas*' (Our Lady of Delivery) and the '*Madonna taz-zellieqa*' (literally Our Lady of Slipping) are invoked for the same purpose. A church is dedicated to the former at Qormi and to the latter at Gargur. St. Lucarda is likewise called upon by parturient women.[18]

Miraculous sacred images and effigies used to be taken to the homes of sick persons; the statue of 'The Holy Virgin with Baby Jesus', conveyed in a portable glass case from the Carmelite church of Valletta to the sick-room, was much in demand during the last century.[19] The Blessing of the Sick is a ceremony held on the feast of St. Rita, patroness of the sick, in the month of May at St. Augustine's church of Valletta.[20] Similar ceremonies are held in other churches.[21]

Small votive offerings of silver decorate many a shrine and church. They are in the form of parts of the human body such as eyes, arms, legs, breasts and hearts. They have been offered in fulfilment of vows and graces received by sick devotees. The following description by an English visitor of the famous sanctuary of 'ta Pinu' in Gozo, as it looked in 1893, gives an idea of the number and variety of these ex-voto which in the past were also made of wax: 'On one side are a number of quaint pictures, portraying various cures and deliverances from danger, while all about, without any method in their arrangement, are hung up the usual little waxen effigies of arms, legs, eyes, babies, etc. intermingled with more solid "ex votos" in the shape of crutches, surgical appliances and so forth . . . Every available corner is fitted with glass-cases, densely packed with gold ear-rings and other gold ornaments . . . These ornaments speak most plainly of favours received and of the gratitude of those who have received them.'[22]

MAGICO-RELIGIOUS PRACTICES

These usually represent a mixture of pagan and Christian beliefs and rites. They comprise the use of charms, such as carrying a dried fig in one's pocket against piles or a dried fish for the cure of rheumatism;[23] the uttering of magic words with occult healing powers; and the use of invocations, incantations and exorcisms either by themselves or in conjunction with the administration of supposedly curative substances such as fumigations with laurel and olive leaves and the drinking of potions, etc. In this combined method, however, more stress is laid upon the magico-religious element than upon the herb or drug itself.

---

[18] Priest, S., *Malte par un voyageur français*, s. 1., 1791, p. 14.

[19] Ferres, A., *op. cit.*, p. 222.

[20] *Times of Malta*, 15th May 1954.

[21] *Times of Malta*, 22nd November 1954.

[22] Kerr, A., 'The Assunta of Gozo', *The Month*, 1893, 20.

[23] Busuttil, V., *Holiday Customs in Malta*, Malta, 1922, p. 157.

There is evidence that the exercise of the magic arts flourished in Malta, as elsewhere, in the sixteenth and seventeenth centuries. In January 1575 the parish priest of Naxxar informed the Apostolic Visitor that in his village there were some women who fumigated sick animals with burned laurel leaves; they also uttered certain words, unknown to him, while going round the animal. These women were reported to the bishop and put on trial but were released on bail.[24] It is not improbable that similar procedures were employed in the treatment of sick human beings. In 1591 the Bishop Tommaso Gargallo banned all books on astrology, necromancy, palmistry and other forms of divination and condemned all those who exercised the magical arts. The ecclesiastical authorities also disapproved the practice of washing sick persons in Holy Water containing various plants while reciting certain prayers. Confessors were also warned to be on the look-out for penitents who made use of herbs in the treatment of disease or wounds without the doctor's recommendation but simply on the strength of superstitious beliefs.[25] Most probably such use of plants was forbidden because the herbs may have been gathered to the accompaniment of pagan rites and incantations as is known to have been the custom in earlier times. In spite of these precautions, the resort to magic persisted for many years afterwards. Thus in 1625 the clergy were enjoined to denounce persons dealing in magical practices to the Bishop or to the Inquisitor[26] while Bishop Balaguer Cammarasa repeated the same directives in 1646.[27]

Belief in the power of the devil to cause physical harm is still current among the peasantry. The bruising found on a woman who had hurled herself from a height in an attempt at suicide was ascribed to the work of the devils because she had sworn by them some time previous to her attempt.[28]

Quite widespread is the belief in the supposedly baneful influences of the 'evil eye'. By this term is meant the power alleged to be possessed by some individuals of inflicting injury or producing illness by merely looking at a person whom they wish to harm.[29] The purely pagan charms in the form of animals, etc. that have been discovered in tombs dating from neolithic times were probably worn to ward off the malicious effects of the evil eye; Maltese farmers still fix a pair of bull's horns to their farms to neutralise its harmful effects. Another way of disarming this malevolent influence is to hold the fingers in a forked position when approaching someone whose eye is reputed to be an evil one. Personal charms comprise olive leaves or fragments of brown wax from the candles used during Holy Week which are usually carried in one's pocket; pieces of the same wax which were stuck to the heads of children; and sea-shells ('*bahbuha*') hung round the child's neck. Other means devised to avert the evil eye and thus protect one's health consist in spitting or in making the sign of the cross on the abdomen. Sickness produced by the evil eye was treated by fumigating the patient with the burnt leaves of the olive tree blessed during Holy Week.[30] Exorcisms in the names of Saints Cosmas and Damian were also chanted during this procedure. Intimately related to the evil eye is the belief in the '*mala mira*', an idea derived from Sicilian folklore, signifying an occult power capable of ruining one's health. The expression '*sar mala mira*' is still heard today and means that a person has become a physical wreck.[31]

---

[24] Manuscript 643, fols. 381 and 382, Royal Malta Library.

[25] Manuscript 6, fols. 35, 70t and 118t, Royal Malta Library.

[26] *Constitutiones in Diocesana Synodo Melivetana*, Messina, 1625, p. 7.

[27] *Decreta Melivetanae Synodi*, Rome, 1646, p. 6.

[28] From Xaghra village, Gozo, 1954.

[29] Busuttil, V., *op. cit.*, p. 138.

Miraculous therapeutic powers have been ascribed to objects which popular imagination and tradition associates with the veneration of saints. Thus country-folk used to carry fossil shark's teeth known as the 'tongue of St. Paul' suspended from their necks as amulets against the bites of vipers;[32] they were also hung round children's necks to promote the eruption of their teeth.[33] These fossils were of various sizes, some of them being nearly as large as a man's hand with beautifully serrated edges and finely polished surfaces. It must be noted that the 'tongue' was still used by medical men up to the beginning of the nineteenth century. When it was discarded by the profession it continued to be sought after by the country-people who applied it in the treatment of various diseases.

The saliva of persons born on the feast of the Conversion of St. Paul was held to be efficacious in the cure of snake-bite.[34] Similar virtues were attributed to the earth dug up from St. Paul's Cave at Rabat (Malta) where St. Paul, St. Luke and St. Trophimus resided for three months following their shipwreck on the Island. Tradition also has it that, through the grace of St. Paul, all the rocks of Malta when reduced to powder and applied to poison bites have the power of neutralising the toxin. The power of curing illness is likewise ascribed to the earth obtained from the crypt of the church of the Immaculate Conception at Qala (Gozo) where a holy man is reputed to have been buried a long time ago.[35]

Small loaves of bread known as 'loaves of St. Nicholas' are hung up on the bedstead together with other devotional amulets to guard against evil accidents. This custom appears to be of Sicilian origin.[36] Flowers from the shrines of saints in our churches are applied to diseased parts of the body to obtain a cure or relief from pain.[37] Treatment for ringworm consisted in immersing a live cowrie or its shell in oil or vinegar or lemon juice and then rubbing it over the affected skin while uttering an exorcising prayer.[38] A balsam possessing the virtue of healing all kinds of wounds was prepared by hiding an egg laid on the 25th March (Lady Day) in a cupboard or on a shelf in the dark. The balsam was ready for use at the end of the year.[39]

---

[30] Cremona, A., 'Race, Language and Myth', *Melita*, 1921, i. 398.

[31] Cremona, A., *op. cit.*, p. 402.

[32] Busuttil, V., *op. cit.*, p. 133.

[33] Geoffroy, M., *Traité de la matière médicale*, Paris, 1757, p. 141.

[34] Godwin, G. N., *The Geology, Botany and Natural History of the Maltese Islands*, Malta, 1880, p. 48.

[35] Ferres, A., *op. cit.*, p. 602.

[36] Cremona, A., 'Some Myths and Beliefs in Maltese Folklore', *Melita*, 1923, iii. 119.

[37] From Zabbar, 1954.

Sometimes people are seen making the sign of the cross with their right thumb over their mouths when they yawn. It is said that this usage started in Rome during the pestilence that raged there in the time of Pope Gregory the Great (A.D. 750) when people were struck dead after yawning or sneezing. The custom was prevalent in Malta in the plague of 1592.[40] During the plague of 1813 the image of a double-armed cross was affixed to house-doors as a 'preservative' against the disease. The body of the cross bore a number of letters each representing the initial letter of the words of a pious recitation in Latin.[41]

For relief from headache recourse was had, as late as the eighteenth century, to St. Peter the Dominican martyr. As part of the celebrations held in his honour each year on the 29th April at the church of St. Dominic in Valletta it was customary to distribute iron rings to be applied to the head of sufferers from headache.[42] A similar usage was in vogue in connection with the feast of the beheading of St. John the Baptist held at the oratory of St. John church; in this case, however, the rings were made of silver.[43] This custom recalls a cure for nose-bleeding which consists in placing an iron key on the patient's neck. Underlying these practices was, probably, the association with 'cold iron' which since ancient times was regarded as a protection against evil powers.

Sufferers from jaundice were told to bleed a female tortoise in the leg and make the sign of the cross with its blood on the joints of the arms and legs. If the patient happened to be a woman, a male tortoise was to be bled.[44]

The recitation of an incantation in rhyme calling the aid of St. Margaret formed part of the ritual for the cure of pterygium. During the recitation a special ring ('*hatem*') was passed over the affected eye. Popular imagination has likened the triangular fold of membrane, that constitutes the lesion, to an octopus ('*qarnita*') by which name the condition is known among the country-folk. The curative ring was bequeathed from parents to siblings and was regarded as a precious heirloom.[45] To prevent or to cure a sty, the patient was recommended to throw over his shoulders seven grains of barley into a well.[46]

---

[38] Cassar-Pullicino, J., *An Introduction to Maltese Folklore*, Malta, 1947, p. 40.

[39] Busuttil, V., *op. cit.*, p. 149.

[40] Parisi, P., *Avvertimenti sopra la peste*, Palermo, 1593, p. 3. Busuttil, V., *op. cit.*, p. 154.

[41] Manuscript 1284, no pagination, Royal Malta Library.

[42] Manuscript 142, vol. v, fol. 295, Royal Malta Library.

[43] *Ibid.*, fol. 307.

[44] Busuttil, V., *op. cit.*, p. 156.

[45] M.A., 'Folklore Malti', *Il Malti*, June 1931, p. 67.

[46] Busuttil, V., *op. cit.*, p. 157.

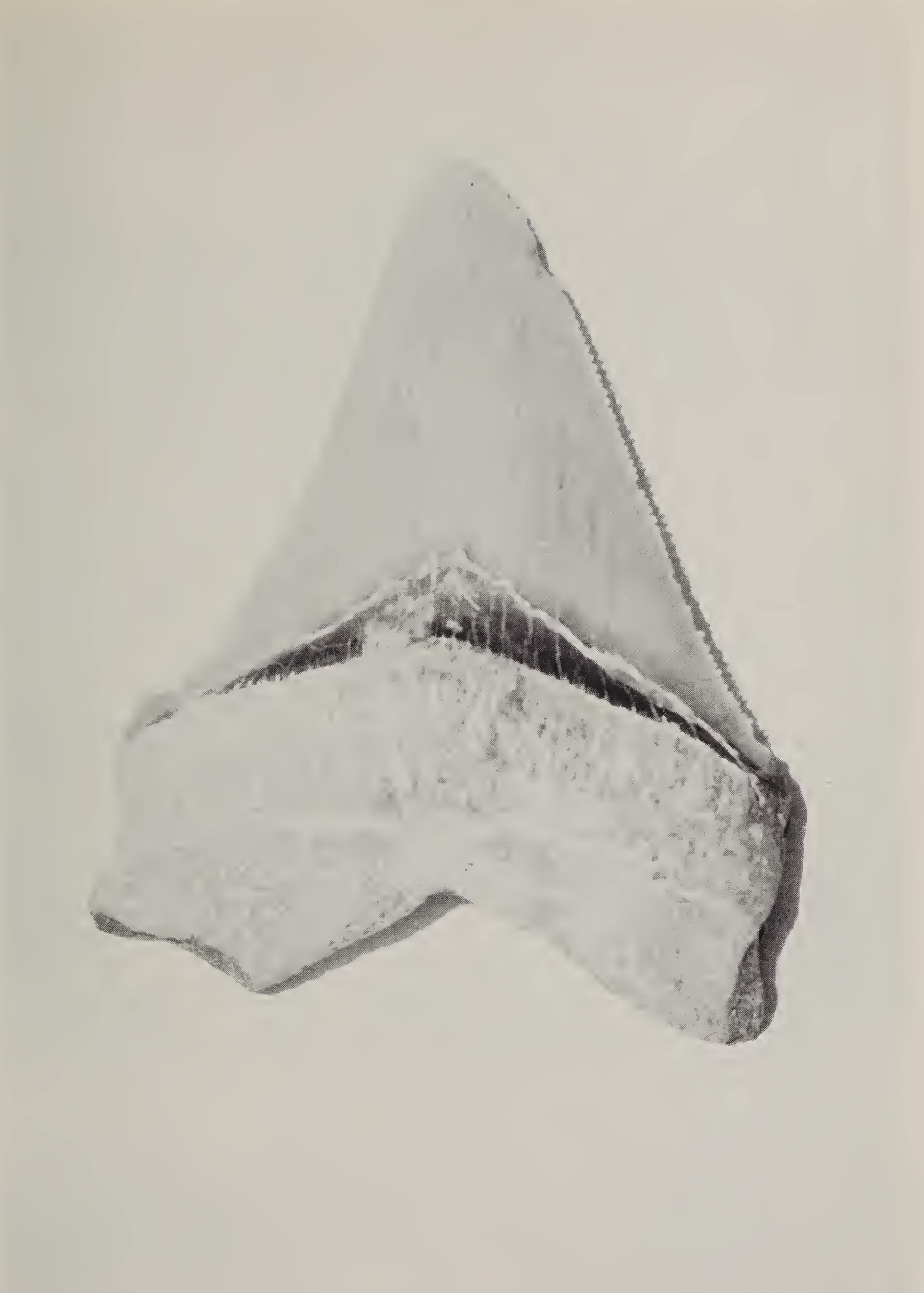
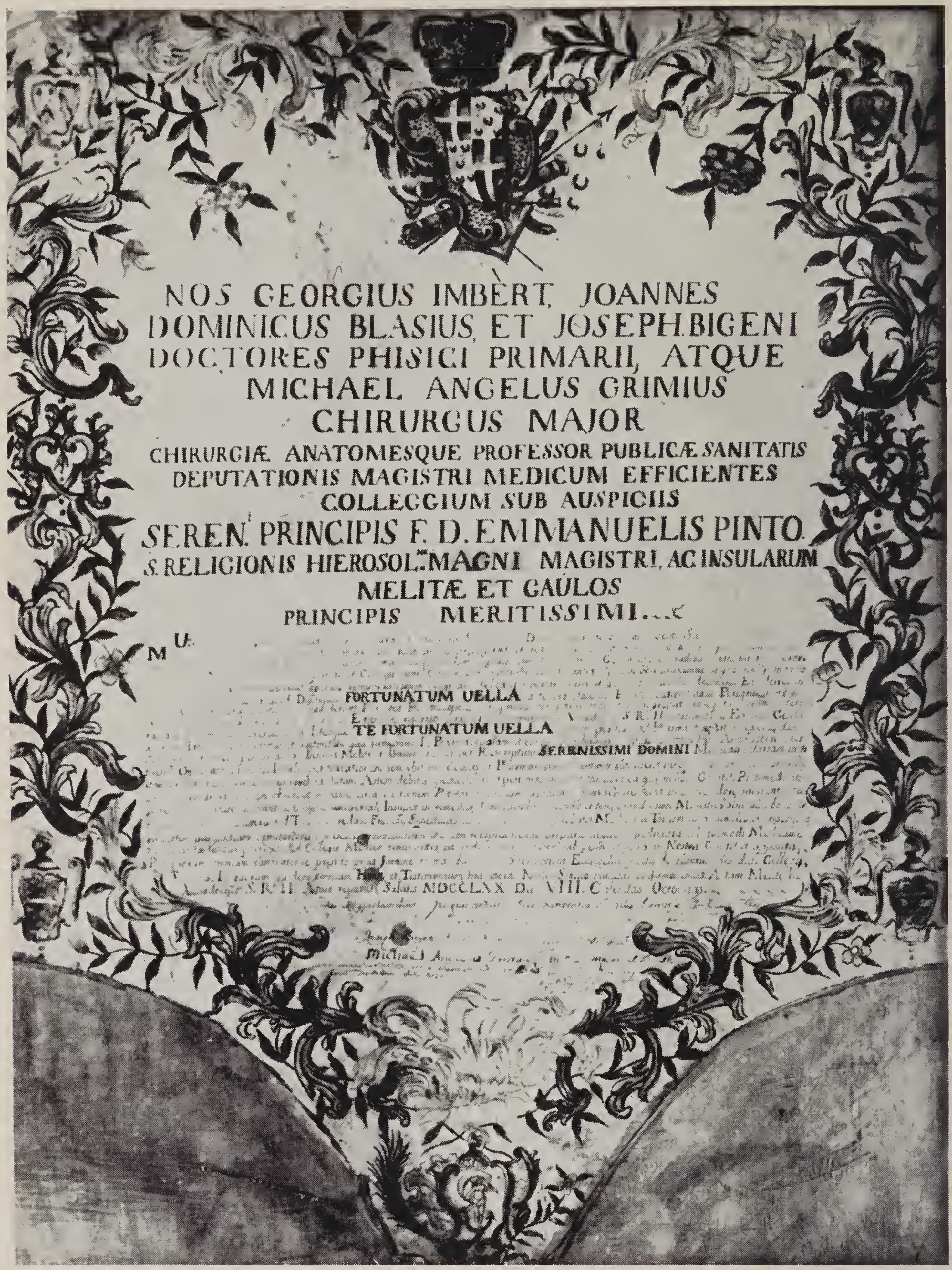


Plate XV

The so-called St. Paul's Tongue. Actually it is a fossil tooth of the shark (Carcharodon Megalodon) found in the globigerina limestone.

Photo by Mr. Joe Pace, Zabbar



NOS GEORGIUS IMBÈRT, JOANNES
DOMINICUS BLASIUS, ET JOSEPH BIGENI
DOCTORES PHISICI PRIMARII, ATQUE
MICHAEL ANGELUS GRIMIUS
CHIRURGUS MAJOR
CHIRURGIÆ ANATOMESQUE PROFESSOR PUBLICÆ SANITATIS
DEPUTATIONIS MAGISTRI MEDICUM EFFICIENTES
COLLEGGIUM SUB AUSPICIIS
SEREN. PRINCIPIS F. D. EMMANUELIS PINTO
S. RELIGIONIS HIEROSOL.MAGNI MAGISTRI, AC INSULARUM
MELITÆ ET GAULOS
PRINCIPIS MERITISSIMI...

FORTUNATUM UELLA

TE FORTUNATUM UELLA

SERENISSIMI DOMINI

Plate XVI

Diploma granted in 1770 by the Medical College to Fortunato Vella authorising him to practise pharmacy. The coat-of-arms at the top is that of Grandmaster Em. Pinto.

The original is at the Royal Malta Library, Valletta

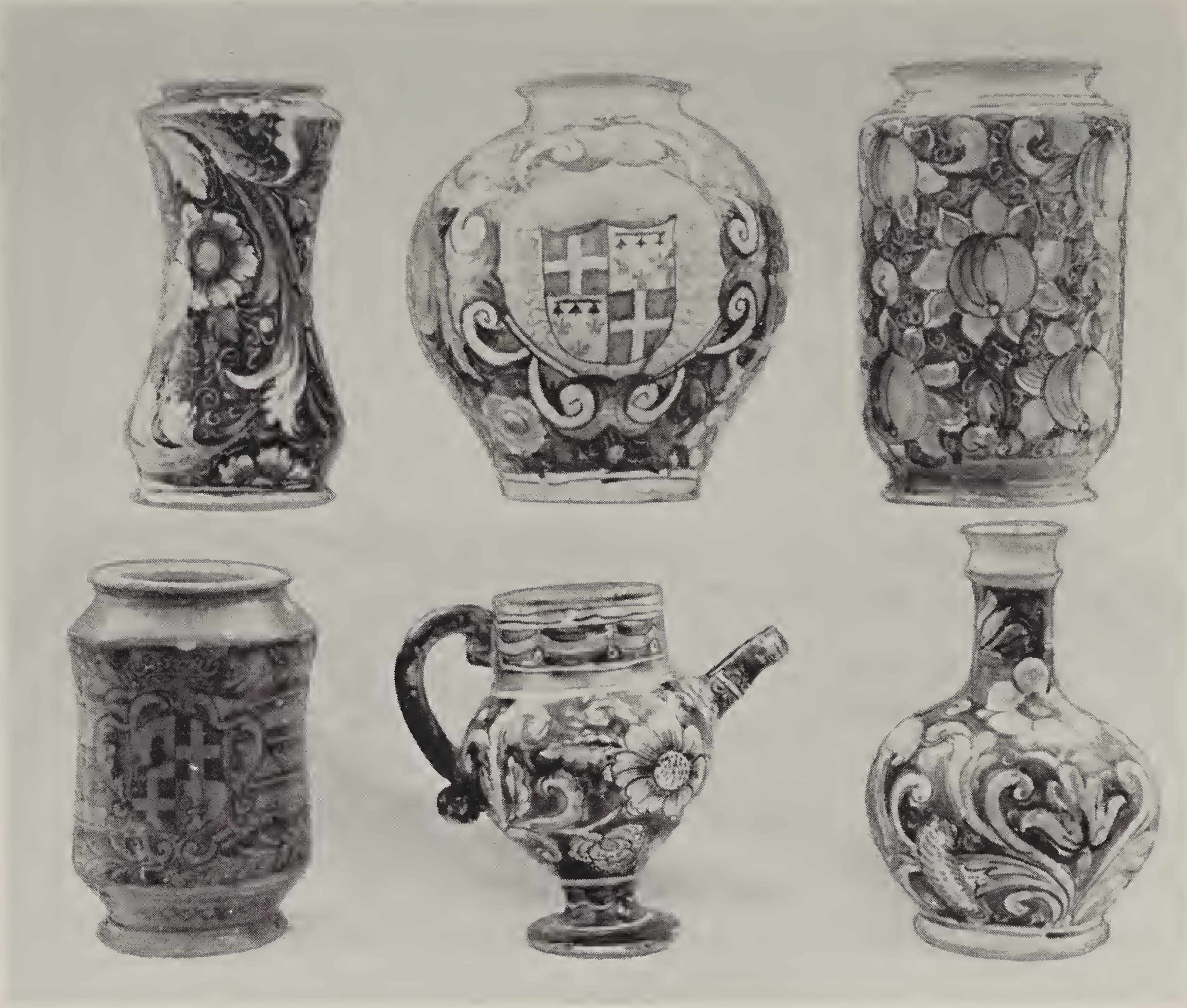
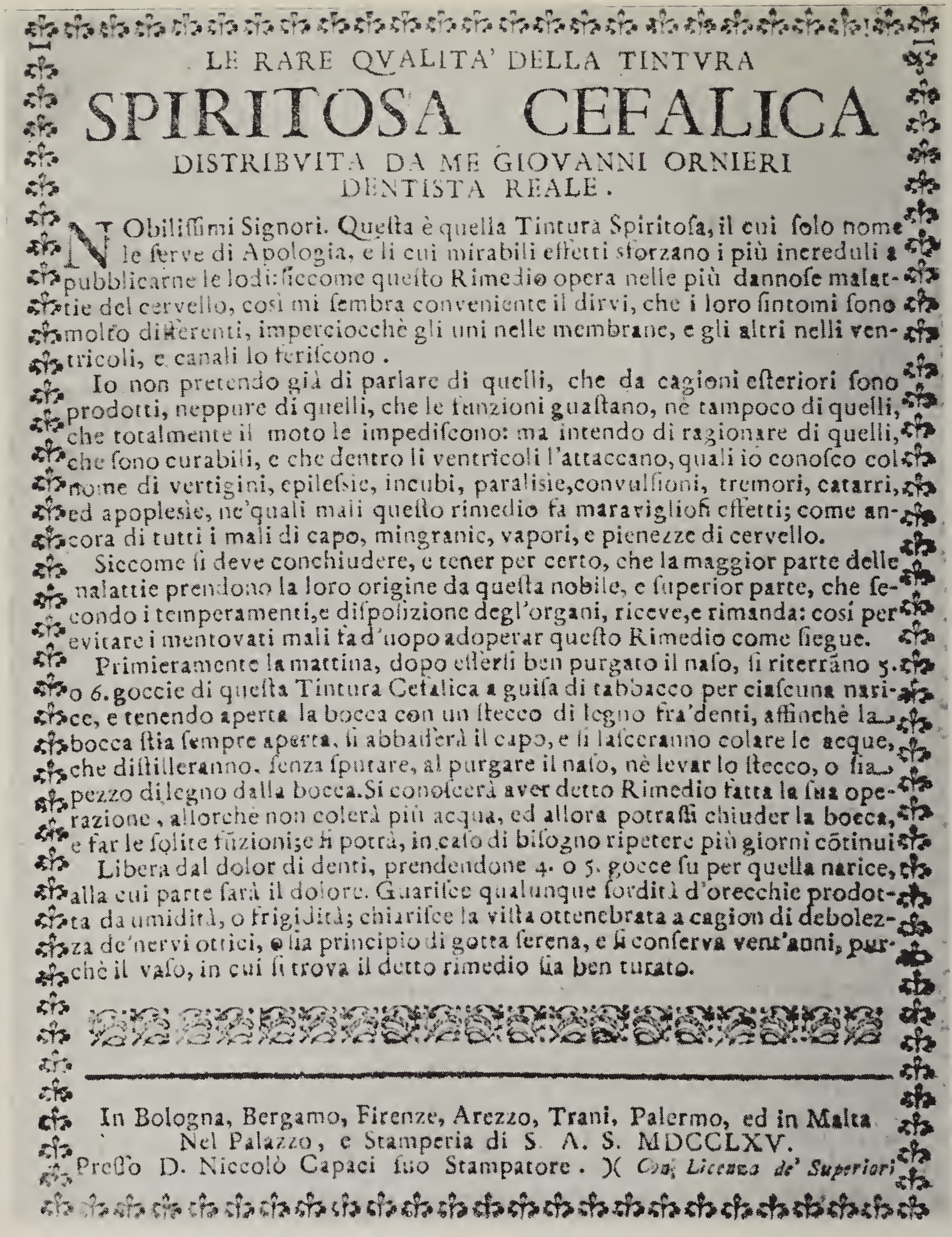


Plate XVII

Types of pharmacy jars in use in Malta during the time of the Order of St. John of Jerusalem. The middle jar in the upper row displays the coat-of-arms of Grandmaster Alofius de Wignacourt (1601–1622). The left-hand jar in the bottom row shows the crest of Grandmaster Ant. Manoel de Vilhena (1722–1736).

By courtesy of the Director of the National Museum, Valletta



LE RARE QVALITA' DELLA TINTVRA

SPIRITOSA CEFALICA

DISTRIBVITA DA ME GIOVANNI ORNIERI
DENTISTA REALE.

NObiliſſimi Signori. Queſta è quella Tintura Spiritoſa, il cui ſolo nome le ſerve di Apologia, e li cui mirabili effetti sforzano i più increduli a pubblicarne le lodi: ſiccome queſto Rimedio opera nelle più dannoſe malattie del cervello, così mi ſembra conveniente il dirvi, che i loro ſintomi ſono molto differenti, imperciocchè gli uni nelle membrane, e gli altri nelli ventricoli, e canali lo feriſcono.

Io non pretendo già di parlare di quelli, che da cagioni eſteriori ſono prodotti, neppure di quelli, che le funzioni guaſtano, nè tampoco di quelli, che totalmente il moto le impediſcono: ma intendo di ragionare di quelli, che ſono curabili, e che dentro li ventricoli l'attaccano, quali io conoſco col nome di vertigini, epileſsie, incubi, paralisie, convulſioni, tremori, catarri, ed apoplesie, ne'quali mali queſto rimedio fa maraviglioſi effetti; come ancora di tutti i mali di capo, mingranie, vapori, e pienezze di cervello.

Siccome ſi deve conchiudere, e tener per certo, che la maggior parte delle malattie prendono la loro origine da queſta nobile, e ſuperior parte, che ſecondo i temperamenti, e diſpoſizione degl'organi, riceve, e rimanda: così per evitare i mentovati mali fa d'uopo adoperar queſto Rimedio come ſiegue.

Primieramente la mattina, dopo eſſerſi ben purgato il naſo, ſi riterrãno 5. o 6. goccie di queſta Tintura Cefalica a guiſa di tabbacco per ciaſcuna narice, e tenendo aperta la bocca con un ſtecco di legno fra'denti, affinchè la bocca ſtia ſempre aperta, ſi abbaſſerà il capo, e ſi laſceranno colare le acque, che diſtilleranno, ſenza ſputare, al purgare il naſo, nè levar lo ſtecco, o ſia pezzo di legno dalla bocca. Si conoſcerà aver detto Rimedio fatta la ſua operazione, allorchè non colerà più acqua, ed allora potraſſi chiuder la bocca, e far le ſolite fũzioni; e ſi potrà, in caſo di biſogno ripetere più giorni cõtinui.

Libera dal dolor di denti, prendendone 4. o 5. gocce ſu per quella narice, alla cui parte ſarà il dolore. Guariſce qualunque ſordità d'orecchie prodotta da umidità, o frigidità; chiariſce la viſta ottenebrata a cagion di debolezza de'nervi ottici, o ſia principio di gotta ſerena, e ſi conſerva vent'anni, purchè il vaſo, in cui ſi trova il detto rimedio ſia ben turato.

In Bologna, Bergamo, Firenze, Arezzo, Trani, Palermo, ed in Malta
Nel Palazzo, e Stamperia di S. A. S. MDCCLXV.
Preſſo D. Niccolò Capaci ſuo Stampatore.)(*Con Licenza de' Superiori*

Plate XVIII

A hand-bill of the Royal Dentist Giovanni Ornieri advertising his 'Cephalic Tincture' for neurological disorders, toothache, deafness and defective eyesight. It was printed in Malta by the Grandmaster's printing press in 1765.

By courtesy of the Director of the National Museum, Valletta

Pregnant women are warned not to look at ugly or deformed persons lest their baby should be born with the same features or deformities. Whenever expectant women express a desire for some kind of food their wish must be satisfied as soon as possible because otherwise the baby runs the risk of being born with a skin mark resembling the desired item of food in shape and colour. Until half a century ago when a woman was about to give birth to a baby a withered Passion Flower (*Anastatica hyerocemthica*) was placed in water. As soon as the flower spread out the woman was delivered of the child. The story is told of a Passion Flower that was misplaced in the confusion that ensued during the confinement of a certain woman. She eventually gave birth to three sons but the flower was nowhere to be found. At last someone remembered that it had been placed in a drawer on opening which, to the amazement of everyone, it was found that the stem of the withered flower had brought forth three branches covered with leaves.[47] According to popular tradition women who believed themselves to be pregnant and on the point of being confined began feeling the labour pains as soon as the flower started to open up in the water; the pains disappeared immediately the flower was removed from the liquid.[48] Another usage connected with delivery was the giving of rings, to parturient women, that had been blessed on the feast of St. Peter (29th June) in the church dedicated to this saint at Zejtun.[49] The ring was thought to facilitate delivery.

St. Julian was invoked in the diseases of children especially in rickets, pertussis and kala-azar or leishmaniasis ('*marda tal bicca*'). The sick child was taken to St. Julian Bay, where a statue of the saint still stands, and given a sand-bath. A pit was dug, the little patient placed in it and then covered with sand for varying periods of time ranging from two to thirty minutes. After a copious perspiration was induced by this means a cordial was administered to the child.[50] A similar procedure was also recommended to sick adults whence the saying 'Bury yourself at St. Julian' ('*Mur indifen San Giljan*').[51] Analogous customs were connected with the ruined church of St. Cyrus near Zurrieq and with the burial place of St. Corrado in the church of Qala at Gozo.[52] Underlying these beliefs is the idea that evil spirits possess the power to substitute healthy babies and children by sick ones; hence the designation of 'changeling' ('*mibdul*') given to these sick children and infants.

To promote early walking in children and to avert the ill effects of frights, babies are dipped into a special bath prepared on Easter Sunday as soon as the 'Gloria' is sung in the churches. In the bath are thrown flowers which were used to decorate the altar of repose on Maundy Thursday and Good Friday.[53] Another usage related to Easter is the fumigation of children to ward off illness with the fumes of burned olive branches that have been blessed on Palm Sunday.

---

[47] Busuttil, V., *op. cit.*, p. 137.

[48] Cassar-Pullicino, J., *An Introduction . . .*, p. 39.

[49] Vella, E. B., *Storja taz-Zejtun u Marsaxlokk*, Malta, 1927, p. 113.

[50] Hennen, J., *Sketches of the Medical Topography of the Mediterranean*, London, 1830, p. 541.

[51] Zammit, T., *Tas-Sliema u San Giljan*, Malta, 1930, p. 12.

[52] Zammit, L., 'Remains of St. Cyrus Church', *Sunday Times of Malta*, 7th July 1946, p. 10. Cassar-Pullicino, J., *An Introduction . . .*, p. 39.

Up to the sixteenth century fright in children was treated by priests who recited some prayers of the Gallican Missal over the children's heads.[54] In later years recourse was had to the Greek Catholic priest who read the Gospel of St. John over the patient's head. This custom was probably introduced in Malta by the Greek Church of Rhodes at the beginning of the Order's rule in these Islands.[55] Children who are late in talking are made to drink from the 'Souls Bell' ('*il qampiena tal-erwieh*'), the bell being so called because it is rung to announce collections for masses for the repose of the souls of the dead. Stammering children are made to drink from the bell on a Wednesday.[56] Sometimes mothers are seen making the sign of the cross with their right thumb over the mouth of a yawning child to prevent it from swallowing the devil while if the child sneezes the mother says, at once, 'Jesus'.[57]

Death is believed to be heralded by certain occurrences or omens. If thirteen persons sit down to dinner, for instance, one of them will die within the following twenty-four hours. This superstition traces its origin to the fact that thirteen was the number of the apostles at the Last Supper, Judas being the thirteenth one. Uprooting a stem of parsley and replanting it foretells the death of a parent within a year while the crowing of a hen is also a harbinger of the demise of a member of the family. The fowl is, for this reason, destroyed immediately. According to another belief he who doesn't dine with his family on New Year's day is expected to die at the end of the twelvemonth, while if pieces of the sponge-tree ('*gazzija*') are brought into a house the head thereof dies within a year.[58] Until some decades ago it was customary to place a dish of salt on the belly of a dead body to prevent the corpse from swelling through early decomposition, the idea being apparently derived from the pickling of organic substances in saline solutions to preserve them from corruption.[59]

FOLK MEDICINE

These pseudo-medical measures consist chiefly in the employment of indigenous herbs and animals, or their products, in the treatment of disease. Many of the remedies have no rational basis but some of them are the residuals of the medical thought of earlier generations of physicians and surgeons such as, for instance, the use of fumigations with rosemary to check the spread of infectious illnesses—a practice that still received official sanction in Malta up to the eighteenth century.

---

[53] Busuttil, V., *op. cit.*, p. 141. Cassar-Pullicino, J., *An Introduction* . . ., p. 40.

[54] *Ibid.*, p. 37.

[55] Cremona, A., 'Race, Language . . .', p. 399.

[56] Cassar-Pullicino, J., *An Introduction* . . ., p. 38.

[57] Cremona, A., 'Some Myths and Beliefs . . .', p. 119.

[58] Busuttil, V., *op. cit.*, p. 153.

[59] Cremona, A., 'Maltese Funeral Customs', *Melita*, 1922, ii. 249.

The following conditions are catered for in Maltese folk medicine.

(a) *Fevers.* One remedy consists in cutting open a live rabbit and applying it with the still warm entrails on the patient's stomach.[60] Smearing the patient with olive oil and applying a mass of snails to the soles of his feet or making him drink the water from certain springs, such as that of Buzigrilla, were held in high esteem as febrifuges. The distilled waters of various plants, especially of '*sambuca*', were used as diaphoretics in febrile illnesses,[61] while the Maltese centaury was administered in the form of a decoction in undulant fever. The flat trunk of the prickly pear is roasted and, after being cut open, is applied to the abdomen of a feverish patient to lower his temperature.[62]

(b) *Swellings and sprains.* Swollen feet are washed with an infusion of oat-grass; swelling in other parts of the body is treated by the application of boiled leaves of the common elder or by rubbing the part with the gelatinous fluid obtained from the seeds of quince. Sprains are dressed with the crushed leaves of rue[63] and painful joints are rubbed with the fat obtained from the eye-sockets of the horse.[64]

(c) Headache is relieved by smelling rose-petals steeped in vinegar; or taking a foot-bath in which a little salt has been thrown by a married woman;[65] or placing several slices of a raw peeled potato over the forehead and bandaging them in position.[66]

(d) *Children's diseases.* The mother of a newly-born baby eats a hen's neck and head on the day following childbirth to ensure that the child will start keeping its head erect at three months. The placenta is macerated with rain, buried into the soil and then watered to prevent the baby from suffering from skin eruptions. The navel string of the newly-born baby is preserved so that when the infant catches a cold he is given the string to smell to drive away the cold. To wean the child the mother smears her breasts with an extract from the aloe tree which has a bitter taste.[67] To empty her engorged breasts, a mother applies a very young puppy to them for drawing the milk. This method was recommended, during the last century, by 'a renowned English physician who used it with excellent effect in his own family'.[68] The starchy powder yielded by the arrowroot is given to suckling infants in the form of a decoction; the petals of the 'four seasons rose' are mixed with those of the peach and administered as a mild purgative. Flatulence calls for a decoction of laurel leaves; dysentery for white of egg; and skin excoriations for the application of powdered myrtle leaves.[69] Children suffering from measles are made to wear an old red dress to draw out the rash.[70]

---

[60] Busuttil, V., *op. cit.*, p. 156.

[61] Hennen, J., *op. cit.*, p. 541.

[62] Cassar-Pullicino, J., *An Introduction . . .*, pp. 41–44.

[63] *Ibid.*, p. 41.

[64] Dr. R. Cefai, from Zebbug village, 1954.

[65] Busuttil, V., *op. cit.*, p. 142.

[66] Hennen, J., *op. cit.*, p. 541.

[67] Cassar-Pullicino, J., *An Introduction . . .*, p. 44.

[68] MacGill, T., *A Handbook or Guide for Strangers Visiting Malta*, Malta, 1839, p. 137.

(e) *Injuries.* Wounds are washed with a decoction of the leaves of the cuckoo plant. The leaves of this plant and of the 'greater plaintain' are applied to purulent wounds to draw out the pus while rapid healing is said to be promoted by the dried 'cat tail' or 'reed mace'. Roasted onions are used to dress wounds produced by the sea-urchin to draw out the spikes of the animal from the flesh. To counteract the effects of wasp stings slices of onion are rubbed over the skin. An embrocation made from rue leaves fired in oil is used for contusions. The tree trunk of the prickly pear is steeped in oil and applied to burns and scalds. Extravasation of blood under the skin is prevented by the triturated leaves of rue. Table pepper and the leaves of the 'clammy inula' are applied to cuts as a haemostatic.[71]

(f) *Respiratory system.* The boiled plants of borage, dog's grass and wall-pellitory were applied to the chest in bronchitis and pneumonia.[72] Coughing is relieved by a decoction of borage or syrup made of carob beans. The water in which dog's grass or wall-pellitory has been boiled is recommended as an expectorant while a decoction of apples is administered in tonsillitis.[73]

(g) *Urinary system.* Decoctions of the horsetail plant, of wall-pellitory and of *Spergularia rubis* were popular for the relief of difficult micturition, for stimulating diuresis and for the expulsion of urinary gravel and stones.

(h) *Alimentary system.* In Roman times Maltese dogs were placed over the epigastrium for the relief of stomach pain.[74] Sweet almond oil was one of the leading popular remedies in the early years of the nineteenth century. Recourse was had to it in many illnesses though it was mainly used for its laxative effects. The plant *Corolleria officinalis*, growing on the seashores of Malta and Gozo, enjoyed the reputation of being a very efficacious vermifuge. During the last century Maltese and British physicians did not scorn to recommend it to women and children infested with intestinal worms though they had to admit that it had no effect on the tapeworm.[75] Pumpkin seeds are eaten for the expulsion of threadworms.[76] Digestion is supposed to be aided by a decoction made from wormwood or southernwood taken early in the morning or by an infusion of anise and common cumin. Abdominal pain is relieved by an infusion of common camomile, the plant being also applied externally as a poultice. Dysentery is treated by a decoction of quince; and jaundice is cured by a preparation of the squirting cucumber or by simply making the patient smell the fruit of this plant. Toothache is soothed by applying the fried leaves of cloves or by chewing the roots and leaves of ground-pine.[77] In some localities a remedy for thrush consists in washing the affected mucosa with the patient's own urine.[78]

---

[69] Cassar-Pullicino, J., *An Introduction . . .*, p. 41.

[70] Dr. R. Cefai, from Zebbug village, 1954.

[71] Cassar-Pullicino, J., *An Introduction . . .*, pp. 41–44.

[72] Hennen, J., *op. cit.*, p. 541.

[73] Cassar-Pullicino, J., *An Introduction . . .*, pp. 41–44.

[74] Caius Plinius Secundus—*Historia Naturalis*, Book XXX.

[75] Hennen, J., *op. cit.*, p. 541.

[76] Dr. R. Cefai, from Zebbug village, 1954.

(i) *Skin.* The acrid milky juice exuding from the cut branches of the fig-tree was employed—successfully according to an English physician of the last century—in the removal of warts and other skin excrescences.[79] The juice of *Chelidonium major* and of lemon are also used for this purpose. Chilblains are treated by a decoction of various species of nettles or by soaking the affected hands and feet in one's own urine[80] while corns are removed by dressing them with the leaves of the *Cotyledon orbiculata.* Ulcers are washed with water in which the common elder plant has been boiled; abscesses and whitlows are matured by covering them with the petals of roses or bread soaked in the milk of a breast-feeding woman. The juice of lemon or of the fig-tree is recommended for ringworm; and *Nerium oleander*, *Plantago psyllium* and *Delphinum staphysagria* for scabies, pediculosis and other parasitical conditions.[81]

(j) *Various remedies and beliefs.* Touching the wall gecko is popularly held to cause leprosy.[82] Patients convalescing from various illnesses used to resort to the village of Zurrieq to breathe its balmy air as this village enjoyed the reputation of being one of the healthiest places in the Island.[83] The 'purification' of the patient's blood formed part of convalescent treatment and a decoction of the common vervain was employed for this purpose. The lemon fruit was also eaten to assist the circulation of the blood. Lemon juice, in the form of instillations, found a place in the treatment of eye diseases.[84] Another cure for ocular troubles consisted in chewing the leaves of rue and then breathing the vapour from one's mouth into the affected eye.[85] A form of treatment for rheumatism was the bee sting. Up to the last years of the nineteenth century it was a common practice to expose oneself to this kind of inoculation in severe cases of the affection with, it was claimed, most favourable results.[86]

FOLKLORE OF MENTAL DISORDER

The themes of insanity and mental deficiency have not failed to tax the imagination of our ancestors and various beliefs have been evolved in an attempt to explain and treat mental disorder. The Maltese lore on these subjects consists of beliefs which regard mental illness as a manifestation of supernatural agencies; and of speculations which try to explain and to cure mental disorder on rational lines.

---

[77] Cassar-Pullicino, J., *An Introduction . . .*, pp. 41–44.

[78] Dr. R. Cefai, from Zebbug village, 1954.

[79] Hennen, J., *op. cit.*, p. 541.

[80] Dr. R. Cefai, from Zebbug village, 1954.

[81] Cassar-Pullicino, J., *An Introduction . . .*, pp. 41–44.

[82] Cremona, A., 'Race, Language . . .', p. 402.

[83] MacGill, T. A., *op. cit.*, p. 137.

[84] Hennen, J., *op. cit.*, p. 541.

[85] Cassar-Pullicino, J., *An Introduction . . .*, p. 41.

[86] *The Mediterranean Naturalist*, 1st April 1893, p. 358.

The Maltese word for insanity is '*Ġenn*'. It is closely allied to the Arabic '*ghafrit ġinn*' which means a wicked spirit, the inference being that insanity is the result of possession by an evil spirit. This idea of possession underlies certain remedies prescribed for the treatment of insanity as can be ascertained from the following practices. One form of treatment in the case of a fright consists in reading extracts of the Gospel of St. John over the head of the afflicted person by the priests of the Greek Church. This practice was already in vogue in the sixteenth century while up to twenty-five years ago it was the custom, in Senglea, to take mischievous children to a priest for a similar procedure in order to allay their restlessness. Even to-day one hears harassed mothers referring to their problem children as being '*indemonjati*', that is possessed by the devil. The reading of the Gospel is a kind of exorcism. More energetic means were adopted in the past against the presence of evil spirits that were believed to trouble insane persons. As late as the first quarter of the last century insane patients, who were detained at the Ospizio of Floriana, were subjected to severe beatings in the belief that they were possessed by the devil. There is a hint that even until 1863 insanity was still regarded by certain sections of the community as a form of possession. In fact a statue of St. Vincent Ferreri, who was renowned for casting out devils, was donated in that year to the patients of the mental hospital at Attard. It is of interest to note that our ancestors also believed in the demoniacal possession of animals as the custom of blessing animals on St. Anthony's feast day shows.

In some cases the influence of the 'evil eye' is blamed as the cause of a mental illness and a particular person may be indicated as the individual responsible for casting the 'evil eye' on the patient. Sometimes no specific personal source is given and the evil influence is conceived as being a malign power permeating a certain locality or house. Also commonly encountered is the belief that mental illness is the result of a spell cast by an enemy or evil wisher.[87]

Epilepsy is popularly known as the 'moony sickness' from the idea held in the past that the moon and the stars determined the occurrence of fits. This disease is looked upon with feelings of dread and awe; indeed epilepsy has obtained such a hold on popular imagination that some people, especially country-folk, make use of the expression 'God protect us'—an invocation that is often uttered when mention is made of such other dreaded diseases as plague, cholera and leprosy. It is highly probable that epileptics were thought to be possessed by evil spirits—a belief that was current centuries ago in various communities. A fanciful remedy for epilepsy consists in killing a tortoise and drinking its blood. In order that

[87] Cassar, P., 'The Concept of Mental Disorder in Maltese Traditional Lore', *The Chestpiece*, 1950, i. 18.

the cure be efficacious the blood must be drunk immediately after the fit occurs.[88]

Until the close of the last century it was believed that persons born on Christmas Eve were transformed once a year on this day into a ghost (called '*gawgaw*' in Maltese) while they were asleep. Thus changed they were compelled to wander about their neighbourhood frightening people with their groanings. Towards dawn they returned home in an exhausted state. By the time they woke up in the morning they had resumed their human form but they were unable to recall their nocturnal doings. It was thought that this transformation was a punishment from God imposed upon those who were born on the same day as his Son because the Lord disapproved of anyone being born on the same day as Jesus Christ. The remedy against this transformation consisted in inducing the sufferer to sit up all night and to count the holes in a sieve from eleven o'clock at night to the following Christmas morning.[89] It is evident that the '*gawgaw*' superstition tries to account for somnambulistic phenomena. The wandering away from home in the night, the presence of strange behaviour during sleep and the subsequent amnesia have always baffled the lay mind. It is not surprising, therefore, that in the past an explanation was evolved on the supernatural plane to account for mental mechanisms which were then unknown.

In spite of the prevalence of superstitious beliefs, the popular mind did not fail to form various concepts on rational lines in its attempts to explain mental illness. Suppression of menstruation, for instance, is believed to cause insanity. The idea is current that menstrual blood is 'bad' blood; if it is not shed when the period is due it rises to the head and produces madness. Insanity is held to occur also if a woman washes her hair during the menses. The action of alcohol on the brain is explained on similar lines. It is believed that wine and spirits heat the blood and cause it to rush to the head thus inducing a fit of madness. Insufficient nourishment as a cause of insanity is deeply ingrained in the popular mind; hence the treatment of all forms of mental illness by the intake of large amounts of milk and eggs to strengthen the supposedly weak brain. Fright is often blamed for the production of mental disorder and various remedies have come down to us to ward off its effects. The advice is often given to urinate immediately after one has had a fright, perhaps with the idea of ridding oneself of any noxious substances that are imagined to be formed in the body as a consequence of the fright; in fact when a person has experienced a great fright he is spoken of as having been so upset that 'he passed blood in his urine'. The drinking of a special mixture is also recommended. Up to some years ago there was an old woman at the town of Birkirkara who enjoyed a wide reputation among the country-folk for the preparation of a mixture the ingredients of which she kept secret.[90] A more drastic remedy has been recorded. A puppy is killed and boiled in water. The broth is then given to drink to the person upset by the fright. The boiled puppy is next thrown into the plate while the patient is not on his guard in such a way as to startle him.[91]

---

[88] Cassar-Pullicino, J., Personal communication.

[89] Busuttil, V., *op. cit.*, p. 134.

[90] Dr. J. Pisani, from Birkirkara, 1959.

The mischievous and humorous side of mental deficiency has been personified in the character of the boy 'Gañan' about whom numerous stories have been spun. Here is an example. His mother fell ill and the doctor asked her to provide him with a sample of urine for examination. When the doctor called the following day, Gañan presented him with a chamber-pot filled with urine. The doctor expressed great surprise at the large amount of urine passed by the patient, but Gañan promptly remarked: 'Besides my mother's the chamber-pot also contains my urine, but my portion is on top.'[92] The expression '*donnok Gañan*', meaning 'you behave like a fool', is still current. Another saying with the same connotation, but which one does not hear nowadays, is '*donnok Canu*', the reference being to a simpleton who, during the siege of Malta of 1565, hurled a pot containing burning material at his own comrades instead of at the enemy.[93]

---

[91] Busuttil, V., *op. cit.*, p. 156.

[92] Bonelli, L., *Saggi del folklore dell'isola di Malta*, Palermo, 1895, p. 22.

[93] *Ibid.*, p. 28.

CHAPTER 46

Medical Education

TEACHING OF SURGERY

THE first steps to establish a chair for the study of anatomy and surgery were taken in the late seventeenth century. On the 19th December 1676 Grandmaster Nicholas Cottoner announced to the Order's Council the foundation, at his own expense, of a School of Anatomy and Surgery at the Holy Infirmary. The teacher and director was to be a physician chosen by the Grandmaster and he was to deliver lectures not only to the barber-surgeons of the Holy Infirmary but also to all those youths who wished to enter the surgical profession. The Council of the Order of St. John of Jerusalem welcomed and approved the Grandmaster's decision and commended him for introducing such a 'necessary and important' innovation.[1] The Chair was to be subsidised by the revenues accruing from the property of the Cottoner foundation which the Grandmaster had established for the maintenance of the Chair and of the garrison of Fort Ricasoli.[2]

Initially only theoretical anatomy and surgery were taught, as was still the custom in parts of Europe, but lectures in physiology, pathology, semeiotics, hygiene and therapeutics were added in later years in so far as these subjects had a bearing on surgery.[3] Only those who knew how to read and write (presumably Italian) were eligible for the course in surgery which, in 1682, was fixed at ten years to ensure that the surgeons who qualified from the school were proficient in their craft.[4]

The first director and teacher of the school was Dr. Fra Giuseppe Zammit. Very few biographical data have reached us about him. He was a priest and a member of the Order of St. John of Jerusalem being a Chaplain of Obedience under the title of St. Paul-by-the-Sea. In recognition of his services to the school he was made a member of the Medical College of the Holy Infirmary by Grandmaster Gregorio Caraffa, which was the highest honour that could be bestowed on a physician in Malta in those days.[5] He was the Protomedicus or Physician-in-Chief of five successive

---

[1] Archives 262, fol. 61 and Appendix. Manuscript 279, vol. ii, fol. 833, Royal Malta Library.

[2] Julyan, P. G., *Report on the Civil Establishments of Malta*, London, 1879, p. 64.

[3] Archives 578, fol. 140, Royal Malta Library.

[4] Archives 646, fol. 162, Royal Malta Library.

[5] Gulia, G., *Cenni storici dell'istruzione superiore principalmente della scuola medica nei tempi dell'Ordine*, Malta, 1886, p. 7.

Grandmasters and was responsible for the foundation of the Medical Academy in 1679.[6] He was also the founder of the Botanical Gardens now at Floriana. In 1687 he left his library to the Holy Infirmary whence it was subsequently transferred to the nearby Camerata building and finally to the Public Library in 1797.[7] His manuscripts have been lost.[8] He died on the 2nd November 1740 at ninety years of age at Balzan and was buried in the parish church of that village.[9] His successor as director of the school was Dr. Giuseppe Farrugia who, though he made a reputation for himself as a surgeon, left no literary works.[10]

Anatomical dissection as an academic subject was being performed at the medical school of Bologna as early as the fourteenth century while provisions for the supply of cadavers for dissection were made in various countries in the sixteenth century. Neither Zammit nor Farrugia dissected the cadaver so that dissection for study purposes was started rather late in Malta. In fact it was not until 1720 that Grandmaster Marcantonio Zondadari contemplated its introduction in the School of Anatomy and Surgery.[11] A dissection room had been built in 1716 being furnished with the necessary instruments supplied by the most famous and expert makers of Paris.[12] It has been suggested that dissection was not started earlier because of the current superstition against the cutting up of the human body[13] but it appears that the real reason was that neither Zammit nor Farrugia possessed the necessary training and experience to dissect the body. This would explain why the Grandmaster sent a Maltese surgeon, Gabriele Henin, to study anatomy at the Hospital of Santa Maria Nuova of Florence at the Order's expense. On Henin's return to Malta, Grandmaster Ant. Manoel de Vilhena appointed him head-teacher at the Holy Infirmary in 1723 and directed him to deliver public lessons in anatomy with demonstrations on the cadaver.[14] At first these lecture-demonstrations took place once a week during the winter months but they were subsequently held daily. The year 1723, therefore, marks the beginning of dissection for teaching purposes in Malta.

The dissection room was situated in the cemetery of the Infirmary. This burial ground was very close to the Infirmary and adjacent to the Women's Hospital and Nibbia's Chapel. The room has thus been described in an eighteenth-century diary written in Italian: 'At the end of the left side of the cemetery one reaches a small room by ascending a few small steps. Here the physicians and surgeons meet daily for dissection and for giving lectures to foreign pupils who come from many foreign parts to learn anatomy.'[15] The Anatomical Theatre of the Royal University of Malta still occupied this site until the beginning of the Second World War when it was destroyed by air bombing.

---

[6] Manuscript 429, Bandi 1722–36, fol. 13, Royal Malta Library. Ferres, A., *Memorie dell'Inclito Ordine Gerosolimitano*, Malta, 1881, p. 268.

[7] Archives 276, no pagination, Royal Malta Library.

[8] Gulia, G., *op. cit.*, p. 8. Catalogue of Manuscripts, p. 11, Royal Malta Library.

[9] Manuscript 20, fol. 56, Royal Malta Library.

[10] Gulia, G., *op. cit.*, p. 9.

[11] Grima, M. A., *Instituzioni d'anatomia*, Venice, 1781, p. 31.

[12] Mifsud, A., 'Appunti sugli archivi di Malta', *Archivum Melitense*, 1912–1913, ii. 54.

[13] Gulia, G., *op. cit.*, p. 9.

[14] Grima, M. A., *op. cit.*, p. 32.

Students were taken on for training in surgery at an early age; for instance, Michel'Angelo Grima, who in later years occupied the Chair of Anatomy and Surgery, started his apprenticeship at the age of twelve years.[16] To make certain that the pupils followed their studies seriously and derived the maximum benefit from the instruction imparted to them a set of rules governing the teaching of anatomy and surgery was published on the 17th December 1729.[17] Students were admitted only after they had been examined and approved by one of the surgeons of the Infirmary and by the teacher of anatomy. They were enjoined to be obedient and respectful towards their masters and to perform punctually all the tasks assigned to them. Special stress was laid on their attendance at the anatomical demonstrations; in fact these demonstrations were to be attended not only by all the surgeons and barber-surgeons of the Infirmary but also by the surgeons of the Order's ships that happened to be in harbour at the time. To appreciate the importance of this last provision it must be remembered that the Order was continually at war with the Turks and the African corsairs. The naval surgeons of the Order, therefore, had to be well versed in the surgical arts for while on a cruise they were liable to be called to deal with wounded casualties at any moment. Thus, to mention but one instance, in the engagement off Lampedusa on the 8th October 1700 the number of men wounded on the Christian side was eighty-five and on the Turkish side thirty-two.[18]

A decree of the 5th June 1739 confirmed the rules of 1729 and added fresh ones. Once a week, on Thursday, surgery students were to attend anatomical demonstrations in that part of the Infirmary known as the 'Public study of Dr. Zammit' which was the lecture room where Dr. Fra Giuseppe Zammit used to teach in his time. They also had to be present during operations and to assist operated patients and to watch them for some 'unexpected haemorrhage'.[19] They took part in post-mortem examinations at the Infirmary and likewise in private houses in the case of patients who died of unknown causes in their own homes.[20] In order to overcome any prejudice against the dissection of the human body and also to provide the teacher of anatomy with the necessary material it was laid down that all the corpses of the Grand Crosses, Knights and other persons of the Habit and of patients dying in the Infirmary were to be dissected in accordance with the directions of the physicians and surgeons. This step was a noteworthy advance on the arrangements existing in some continental medical schools where only the unclaimed bodies of patients dying in hospital were available for dissection.[21] Students also received instruction in the use and introduction of the catheter by one of the two lithotomists on the hospital staff. It was incumbent on these lithotomists to ascertain that the students became proficient in the manipulation of the instrument[22] and to report to the Head Infirmarian any of the students who failed to pay the necessary attention to their studies. The punishment awarded consisted in the forfeiture of one bread ration for the first and for the second offence; a third lapse was followed by dismissal from the post 'without any hope of a future reinstatement'.

---

[15] Manuscript 142, vol. vi, fol. 323, Royal Malta Library. Bedford, W. K. R., *The Regulations of the Old Hospital of the Knights of St. John*, London, 1882, p. 11.

[16] Cassar Pullicino, J., 'Michel'Angelo Grima chirurgo maltese del settecento', *Rivista di Storia Delle Scienze Mediche e Naturali*, xl. 3.

[17] Manuscript 378, no pagination, Royal Malta Library.

[18] Visconti, A., 'Documenti milanesi sull'ordine Gerosolimitano', *Archivio Storico di Malta*, 1936, viii. 48.

[19] Archives 660, fol. 211, Royal Malta Library.

[20] Archives, 543, fol. 197t, Royal Malta Library.

Very little is known about Dr. Gabriele Henin. He lectured in Italian on physiology, pathology and obstetrics besides anatomy and surgery. He also taught anatomy and the technique of lithotomy.[23] Besides being the chief surgeon and lithotomist at the Infirmary he was also an oculist and enjoyed the reputation of being 'a prominent man in his profession'.[24] In 1749 he published a brief account in Latin of a case of 'sarcoma' of the back which he removed successfully with the survival of the patient, who had come to Malta from Messina to consult the Infirmary surgeons about his illness.[25] He continued to teach until 1753 when he became mentally ill. He died in the following year on the 15th October.[26]

Henin was succeeded by Dr. Enrico Maggi, described as being Maltese, who soon after his appointment was seized by an apoplectic stroke and became incapable of carrying on with his teaching duties.[27] Thus the school fell on evil days and the number of pupils decreased. Dissection was performed only occasionally and in a perfunctory manner in the case of some violent death.[28] It is difficult to understand why no immediate steps were taken to replace Dr. Maggi when he became ill but it has been said that the chair remained unoccupied on account of the intrigues of the Inquisitor, Mgr. Gregorio dei Duchi di Salviati, who claimed that the chair should be given to his private physician who had accompanied him to Malta in 1754.[29] This physician was Vincenzo Galli who, perhaps with the intention of currying favour and impressing the Grandmaster, gave a few good anatomical demonstrations when Maggi was stricken down by paralysis. What gives credence to this supposition is the fact that soon after a successor to Maggi was appointed Dr. Galli left the Island.[30]

In the meantime a Maltese surgeon had been studying medicine at

[21] Grima, M. A., *op. cit.*, p. 28. Archives 533, fol. 180, Royal Malta Library.

[22] Archives 543, fol. 197t, Royal Malta Library.

[23] Mifsud, A., *op. cit.*, p. 54. Zammit, T., 'The Medical School of Malta', *Proceedings of the Royal Society of Medicine*, 1920, xii. 133–142.

[24] Manuscript 11, fol. 241, Royal Malta Library.

[25] Henin, G., *Observatio chirurgico-anathomica*, Messina, 1749.

[26] Manuscript 11, fols. 241 and 412, Royal Malta Library.

[27] Gulia, G., *op. cit.*, p. 11.

[28] Grima, M. A., *op. cit.*, p. 35.

[29] Gulia, G., *op. cit.*, p. 12.

[30] *Ibid.*, p. 12.

Pisa and surgery at Florence. He was Michel'Angelo Grima who was born in Valletta in 1731.[31] He started his surgical training at twelve years of age at the Holy Infirmary. After seven years he left for Florence (1750) where he joined the medical school of the then famous hospital of Santa Maria Nuova. Here he dissected the cadaver and learned anatomy and surgery from Antonio Cocchi and Angiolo Nannoni, both of whom followed in the footsteps of the great anatomist of the Renaissance, Andreas Vesalius. Michel'Angelo Grima also took an active part in the cultural life of Florence and eventually became a member of various academies. In 1754 he obtained the doctorate in philosophy and medicine at the University of Pisa but stayed at Florence to work as dissector at the hospital of Santa Maria Nuova. In May of the same year he began his experiments on the suturing, by means of a continuous or spiral stitch, of the intestines in dogs. In 1756 he read a paper on this subject at the Sacra Accademia Fiorentina and four years later published in Paris the results of his experiments in a book entitled *Di un nuovo metodo di cucire gl'intestini* (A New Method of Intestinal Suture) in which he discussed the possibility of the resection and suturing of the intestines in the human being. This work has been judged to be of such a high standard as to 'entitle him to a place among the pioneers of experimental and abdominal surgery'.[32] The publication of this dissertation aroused the jealousy of his rivals in Malta. Some of them interpreted it as a criticism of a Maltese colleague (the surgeon Michele Grillet) to whom Grima made a reference in his book. in 1762 Grima's work elicited the publication at Messina of a hostile review of his book from the pen of Dr. Gaetano Azzopardi and Dr. Giovanni Bruno, both of whom were members of the staff of the Holy Infirmary.[33]

After being approved 'full' surgeon in Florence in October 1758 he asked for, and was granted, a subsidy by the Order's Government to continue his studies in Paris, where he went in the same year. He remained there until 1760 when, for the next two years, he joined the French forces as surgeon during the Seven Years War. It is of interest to remember that John Hunter was a contemporary of Grima and that like him he saw active service in the same war though on the opposite side.[34] When the French entered Germany, Grima worked in military hospitals in Cassel. As a result of his war experiences he published *Della medicina traumatica* (On Traumatic Surgery) in Florence in 1773. This work deals with the diagnosis and treatment of wounds of various parts of the body. In 1763, after almost fourteen years abroad, Michel'Angelo Grima was recalled to Malta by Grandmaster E. Pinto de Fonceca to begin his duties in the medical service of the Order. On his return he was approved Doctor of Medicine in Malta and granted the licence to practise as physician. He was appointed Chief Surgeon of the Holy Infirmary, Reader in Surgery, Superintendent of Surgery and nominated as the future successor of Dr. E. Maggi who, though disabled by illness, had remained in possession of the Chair of Anatomy and Surgery. He very soon made a name as a surgeon and it is known that he performed operations for cataract, fistulae, tumours of the breast and stones in the bladder. He used to carry out the operation of lithotomy in two-and-a-half minutes with survival of the patient. He operated not only in hospital but also in private houses and his services were so much in demand that the Grandmaster placed a carriage at his disposal to enable him to attend to his daily calls as promptly as possible.

---

[31] Cassar Pullicino, J., *op. cit.*, p. 3. Debono, P. P., 'Michel'Angelo Grima', *The Sundial*, 1945, iv. 10.

[32] Debono, P. P., *op. cit.*, p. 10.

[33] Azzopardi, G., and Bruno, G., *Lettera apologetica contro la dissertazione intitolata 'Nuovo e sicuro metodo di cucire gl'intestini del Dr. M. A. Grima'*, Messina, 1762.

[34] Debono, P. P., *op. cit.*, p. 11.

In 1765 Dr. E. Maggi died and Grima succeeded him in the Chair of Anatomy and Surgery. He reformed the school, which had fallen into decay, on the lines of the medical schools of Paris and Florence. He conducted his teaching on the following plan: (a) Dissection of the human cadaver with the purpose of studying the structure of its various parts; (b) forensic anatomy consisting in the performance of a post-mortem examination to discover the cause of death in judicial cases; (c) pathological anatomy; (d) traumatic anatomy; and (e) zootomy or comparative anatomy, which involved the dissection of both animals and human beings. In his teaching Grima availed himself of all that was 'best and truthful' in the writings of past and contemporary anatomists but he was always careful not to accept their statements unless he had confirmed them 'by means of his own observations on the cadaver'.[35]

His manner of teaching traumatic surgery was not only sound but novel and impressive. He held the view that war 'is the great school not only of traumatic surgery but of all medicine' and in conformity with this opinion he tried, in his teaching, to reproduce in the dissection room some of the wounds caused in actual warfare. Following the example of his contemporary Anthony Louis, the Physician-in-Chief of France, Grima used to fire a number of pistol shots in various directions and in various sites of the cadaver, thus producing wounds of different kinds. Having done this he directed his students to extract the bullets and fragments of bone embedded in the wound. When the operative procedures were completed by the student, Grima made him dissect the operated part to ascertain that the operative technique had been faultless.[36] The teaching of operative surgery was thus introduced in the surgical school of Malta and before qualifying as surgeons students had to pass a practical test in this subject. A certificate issued at this period to a surgeon states that the candidate 'performed three of the most difficult and noteworthy operations on the cadaver that is extraction of cataract, lachrymal fistula and cubital aneurysm'.[37]

[35] Grima, M. A., *op. cit.*, pp. 7 and 40.

[36] Grima, M. A., *Della medicina traumatica*, Florence, 1773, pp. 5 and 7.

[37] Archives 1191, fols. 46 and 201, Royal Malta Library.

The dictation of notes by the teacher was, in those days, the accepted method of teaching; this was a time-wasting and tiring procedure[38] and to obviate this disadvantage Grima published an illustrated text-book on traumatic surgery and another one on anatomy for the use of his students. The former was *Della medicina traumatica* already mentioned. In this work he discusses the diagnosis and treatment of wounds; deals with the indications for and the abuses of amputations and describes the manner of extracting bullets from wounds; points out the dangers of agaric as a haemostatic and the advantages of compression and the ligature to stop bleeding; expresses his ideas about the treatment of surgical shock and the medication of wounds; and finally considers cranial injuries and their treatment by trephining of the skull. In this book he likewise gives the clinical histories of twenty-five cases of wounds treated by himself.

His text-book of anatomy was published some years later. He proposed to divide the subject matter into eight tracts: osteology of bones artificially dried and denuded of all their attachments; osteology of bones freshly removed from the cadaver and still having all their appendices; myology; angiology; nervology; adenology or glandular anatomy; splanchnology and dermatology. Of these tracts he only succeeded in publishing the first two at Venice in 1781 under the title of *Instituzioni di anatomia*. The remaining tracts still exist in manuscript form[39] and bear the title of 'Trattato della sarcologia, angiologia e nervologia (1785)'. At the end of each lecture Grima used to announce the subject of the next one to encourage the students to read the text-book beforehand and thus derive more profit from the lecture.

Originally dissection was performed only in winter owing to the dangers to which dissectors were believed to expose themselves when handling dead bodies in the hot climate of the Maltese summer. This seasonal interruption in the study of practical anatomy was remedied in 1766. In this year the hospital received a donation of nineteen anatomical models in coloured wax and a model of the human body of the same material from a certain Anthony Mayer who was a surgeon major of a Swiss regiment stationed in Sicily.[40] As Mayer declined to accept a financial reward for his gift he was decorated with the half-cross of the Order in appreciation of his gesture. The models were deposited in the Library of the Infirmary where they enabled the students to pursue the study of anatomy even in the summer months.

Under Grima's direction the school became famous and attracted not only Maltese but also foreign pupils from as far away as the Eastern Mediterranean. After graduation from the school these men joined the staff of the Infirmary or the naval medical service of the Order or else emigrated to the continent in search of more lucrative posts. Not a few of them became 'excellent and renowned practitioners',[41] although even

[38] Archives 1714, fol. 29t, Royal Malta Library.

[39] Manuscript 1203, no pagination, Royal Malta Library.

[40] Zammit, T., *op. cit.*, pp. 133–142.

[41] Grima, M. A., *Della medicina . . .*, p. 9.

before Grima's time a few surgeons had made a name for themselves abroad. Mention may be made of the anatomist M. A. Magri who, in 1740, was appointed Public Dissector at the Hospital of Santa Maria Nuova of Florence and in 1748 Lecturer in Anatomy and Physiology at the Regio Ospedale di Messina; and of Em. Grillet who became Professor of Obstetrics at the University of Palermo.[42]

An added impulse to the study of surgery in Malta was given by Bali Fra Clemente Ressegnier who, in 1775, established a foundation for the teaching of surgery. He deposited the sum of two thousand scudi with the Order's Treasury for this purpose. The direction of studies was entrusted to Michel'Angelo Grima who inaugurated the new school at the Holy Infirmary on the 11th March 1775. The lectures were given in the morning so as not to interfere with those of the Cottoner foundation which were delivered in the afternoon. Grima's successor was to be chosen by the reigning Grandmaster.[43] Another foundation was set up in 1794 by Bali Fra Nicolo Abry (or Abri) Descallar, Prior of Catalonia, who donated two thousand five hundred scudi for an additional Professorship of Dissection. He chose the young surgeon Giovanni Andreotti to occupy the new post and sent him, at his own expense, to study anatomy and surgery at Florence. Through the efforts of Abry Descallar the Anatomical Theatre was rebuilt on a better plan adjacent to Nibbia's Chapel and furnished with the necessary instruments.[44] A few years later owing to the financial straits in which the Order found itself the Descallar foundation was incorporated with that of Cottoner on the 2nd April 1797 when Grima retired on pension from his teaching post.[45]

Dr. Michel'Angelo Grima died on the 25th August 1798 and was buried in the Church of the Franciscan Minor Observants at Valletta. The following is a list of his works known to us: (a) *Delle osservazioni fatte sopra il corpo vivente d'alcuni animali intorno le ferite penetranti la gran cavità dell'addome*, 1754;[46] (b) *De Cranii Repercussione*, 1756;[47] (c) *Mémoire sur la sensibilité des tendons*, Paris, 1760; (d) *Del nuovo e sicuro metodo di cucire gl'intestini*, Paris, 1760; (e) *Reflexions sur le mémoire sur la taille laterale de M. Bromfield*, Paris, 1761;[48] (f) *Due relazioni medico-anatomiche*, Malta, 1764; (g) *De poplitis aneurismate*, London, 1773; (h) *Della medicina traumatica altrimenti detta vulneraria*, Florence, 1773; (i) *Instituzioni d'anatomia*, Venice, 1781; and (j) *Trattato della sarcologia, angiologia e nervologia*, 1785.[49]

The teacher recommended by the Venerable Economic Commission to succeed Grima in the Chair of Anatomy and Surgery was the surgeon

---

[42] Gulia, G., *op. cit.*, pp. 11 and 15.

[43] Archives 578, fol. 140, Royal Malta Library. Manuscript 1146, vol. 2, fol. 350. Archives 575, fol. 478t, Royal Malta Library.

[44] Archives 248, no pagination, Royal Malta Library.

[45] Archives 1198, fol. 76, Royal Malta Library.

[46] *Novelle Letterarie*, numero 29, 19th July 1754, pp. 449–450.

[47] Zammit, T., *op. cit.*, pp. 133–142.

[48] *Journal de Méd. Chir. et Pharm.*, 1761, xiv. 161.

[49] Manuscript 1203, no pagination, Royal Malta Library.

Aurelio Badat. He started his surgical career in 1757 when he joined the Order's navy as barber-surgeon. After having completed two cruises he was sent to Paris to study surgery at the Order's expense. After ten years in the French capital he returned to Malta and was appointed Senior Surgeon of the Naval Squadron until in 1789 he became the Principal Surgeon of the Women's Hospital, a post which he was occupying at the time of Grima's retirement. No doubts were entertained as regards his competency for the professorship but there was one obstacle which had to be surmounted before he could be appointed to the chair. A *sine qua non* condition of the Cottoner foundation was that the occupant of the Chair of Anatomy and Surgery had to be not only a surgeon but also a physician. It was, therefore, proposed to the Grandmaster that Badat should be granted the title of Doctor of Medicine, since his abilities justified such a step. This suggestion received the *fiat* of the Grandmaster on the 2nd April 1797.[50] Badat was destined to be the last in the series of lecturers in anatomy and surgery during the Order's domination in Malta for the Knights of St. John were expelled from the Island by the French in the following year.

TEACHING OF MEDICINE AND FOUNDATION OF THE UNIVERSITY

In 1769 the Society of Jesus was expelled from Malta. For the preceding one hundred and sixty-seven years the Jesuits had conducted a college for the education of young men in a building erected by themselves in Valletta. After their suppression the Order of St. John was authorised by the Holy See to take possession of the Society's property.[51] Out of the revenues accruing from this property, a university was founded by Grandmaster Em. Pinto de Fonceca and the Jesuit college was taken over to house the new institution. A Bull of Pope Clement XIV, dated 20th October 1769, confirmed the foundation of the university and laid down that academical degrees were to be conferred according to the terms of the Council of Trent, while the professors and teachers were required to make the Profession of Faith before the Inquisitor—a duty that was also imposed upon the students before they were granted an academical degree.[52] The three faculties of Theology, Law and Medicine were established in 1771. Before this time, in the absence of facilities for the study of medicine in the Island, young Maltese men desirous of becoming physicians had to pursue their studies and obtain their qualifications abroad. They usually began their study of medicine privately with one of the senior physicians of the Holy Infirmary in Valletta for a period of two years and then joined a medical school or university in Italy or France, such as those of Naples, Salerno and Montpellier. On returning to Malta after obtaining their medical degree they had to submit to an examination by the Protomedical College consisting of the three senior physicians and of the senior surgeons of the Holy Infirmary following a period of practical work at this hospital.[53]

---

[50] Archives 1198, fol. 77, Royal Malta Library.

[51] *Malta Government Gazette*, 13th June 1901, pp. v and vii.

[52] Scicluna, H. P., 'Some Important Documents of the Archives of the Sovereign Military Order of St. John of Jerusalem and of Malta,' *Archivum Melitense*, 1912, i. 168.

The first statutes of the new university were based on those of the University of Bologna and were published on the 22nd May 1771.[54] The Chair of Anatomy and Surgery founded by Grandmaster Nicholas Cottoner was incorporated in the new institution; in fact the statutes make references to it, while in 1773 the Chair is alluded to in a contemporary document as the 'lectureship in anatomy in the College of St. Ignatius', i.e. the university, which had replaced, and been housed in, the Jesuit College.[55] The studies were divided into courses. There was a Preparatory Course comprising Latin, Italian, Greek and Roman History, philosophy, physics and mathematics. This course led to the Degree of Master of Arts and preceded one of the Superior or Academical Courses or Faculties, i.e. Theology, Law and Medicine.

The subjects of study in the Academical Course of Medicine were botany, chemistry, anatomy, surgery and medicine. The course lasted five years. At the end of the second year the student obtained the Bachelorship; after the fourth year, the Licentiate; and at the end of the final year, the Doctorate. At the head of the Faculty of Medicine was the Medical College. This body conducted the examinations of the students and was formed of the professors of the faculty and of doctors who had publicly expounded and defended a thesis on such subjects as anatomy, philosophy, the aphorisms of Hippocrates and practical medicine.[56] The first Medical College was composed as follows: Dr. Gaetano Azzopardi, Principal Physician (retired) of the Holy Infirmary; Doctors G. J. B. Locano, M. A. Grima, G. Imbert, G. D. Biagio and G. Bigeni, Principal Physicians of the Holy Infirmary and members of the Protomedical College; and Dr. Lorenzo Theij (or Thein), Physician for the Poor of Valletta.[57] In the event of a vacancy of one of the professorships the Medical College nominated three candidates from among whom the new professor was then chosen. In this selection preference was given to those candidates who, besides other qualifications, possessed a knowledge of Greek. The salary of the professor was increased after five years' service and especially if he had published some outstanding work under the title of 'Professor of the University of Malta'.[58]

The original university Statutes (Title Ten) dealing with medical teaching stipulated that: (a) the Professor of Medicine had to explain the elements of pathology, semeiotics, hygiene and therapeutics; (b) he was to discourse on the specific diseases, on fevers and on the practice of medicine; (c) he was also to teach theoretical and practical chemistry, when and where convenient to him; and (d) he had to conduct his students to the Botanical Gardens to instruct them in their botanical studies during the week-end holiday. The part of the Statutes (Title Eleven) concerning anatomy and surgery laid down that: (a) the lecturer must teach anatomy and surgery with such clearness and precision as to enable his students to learn their true principles and theories; (b) he was to take his students to the Holy Infirmary every Saturday in winter time to hold demonstrations by dissecting the cadaver himself or else by selecting one of the more advanced students to do so under his direction; and (c) he was to see that his pupils assisted at major operations and that those who failed to do so repeatedly were not granted the necessary testimonials.[59]

---

[53] Archives 1191, fol. 167; Archives 1192, fols. 33, 66 and 180; Archives 1193, fol. 1; Archives 1189, fols. 65 and 67, Royal Malta Library.

[54] Archives 575, fol. 459, Royal Malta Library.

[55] Manuscript 1146, vol. ii, fol. 216, Royal Malta Library.

[56] Archives 575, fol. 489t, Royal Malta Library.

[57] Archives 575, fol. 500, Royal Malta Library.

[58] Laurenza, V., *Il primo rettore e i primi statuti dell'Università di Malta*, Malta, 1934, pp. 12–16.

The division of the programme of studies into a medical and a surgical branch resulted in the addition of a new lecturer; thus while anatomy and surgery continued to be taught by Dr. M. A. Grima, the teaching of botany and other medical subjects was entrusted to Dr. Giorgio J. B. Locano.[60] He studied medicine at Montpellier obtaining the doctorate of that university in 1749. Two years later he was elected member of the French Royal Academy of Sciences.[61] On returning to Malta he spent some time as physician in the Order's navy (1754) being subsequently appointed physician to the Women's Hospital and District Medical Officer of Valletta.[62]

Financial difficulties soon cropped up and hampered the growth of the university. The funds derived from the property of the Jesuits proved inadequate for the support of the new institution as the major part of them was absorbed by the life pensions granted to the expelled Jesuits.[63] To overcome this obstacle Grandmaster Em. Pinto de Fonceca temporarily endowed the university with the revenues accruing from the stores at the Marina of Valletta; but even this donation was insufficient to meet the expenses of the university, which from its foundation until 1773 had cost the Common Treasury over twenty thousand scudi. To relieve the Treasury of this burden Grandmaster Ximenes de Texada, by a decree of the 16th September 1773, abolished the Chair of Medicine.[64] His successor Grandmaster Em. de Rohan took immediate steps for the restoration of the suppressed Chair, his intention being ratified by the Chapter General of the Order on the 11th January 1776.[65] It appears, however, that the Medical Faculty had not yet started functioning by 1780; in fact on the

---

[59] Archives 575, fols. 478t and 479, Royal Malta Library.

[60] Archives 575, fols. 498t and 501, Royal Malta Library.

[61] Archives 1189, fol. 65, Royal Malta Library.

[62] Archives 1192, fol. 180, Royal Malta Library.

[63] Archives 773, fol. 21, Royal Malta Library.

[64] Archives 273, fol. 21, Royal Malta Library.

[65] Archives 309, fol. 44, Royal Malta Library.

10th October of that year Dr. G. J. B. Locano, having learned of the Grandmaster's decision to set up once more the Chair of Medicine, petitioned His Eminent Highness to reappoint him to the Chair. His request was granted[66] and he occupied the Chair until 1797. Locano wrote short Latin treatises on the physiology and anatomy of the female reproductive system, on the duct of the spinal medulla, on the functions of the muscular system and of the nerve-cells.[67]

The Doctorate in Medicine was granted to students after approval at a private and a public examination, and after the delivery of an 'academical discourse' on a medical subject at the Gesu Church which is the church of the university. The licence to exercise the profession was not, however, granted until he had done six years' clinical practice at the Infirmary.[68] The first to qualify as a physician from the University was Dr. Giuseppe Grech who later succeeded Dr. Locano in the Chair of Medicine.[69]

DECLINE AND REVIVAL OF THE UNIVERSITY IN THE NINETEENTH CENTURY

With the expulsion of the Order of St. John from the Island and the subsequent occupation of Malta by the French under Napoleon, the educational and cultural life of Malta was disrupted. The new masters abolished the university and the medical studies were interrupted for a time. The Holy Infirmary, which had hitherto been the teaching hospital of the university, was taken over by the French for their troops. It is true that plans were envisaged for the teaching of anatomy, medicine and midwifery at the Infirmary but they were not carried into effect owing to the political upheaval that ensued in the following two years. When the French occupation came to an end the study of medicine and surgery gradually began to come into its own again; in fact one of the first acts of the British Royal Commissioner, Sir Alexander Ball, was the re-establishment of the university on the 6th November 1800.[70] Medical studies were resumed in the same year and the Collegium Medicum or Faculty of Medicine was constituted. Ten of its members formed part of the General Council which was set up to assist the Rector in the conduct of the affairs of the university.[71] The first medical men to qualify from the university under British rule underwent a private examination before three doctors on the 26th May 1804 and a public examination on the 16th July. This, however, was not the invariable procedure for granting degrees, for on the 5th March

---

[66] Archives 1193, fols. 185 and 211, Royal Malta Library.

[67] *Dissertatio physiologica de mechanico feminarum tributo*, Monspelii, 1749. *De novo spinalis medullae ductu*, Malta, 1761. *De imperio muscolorum in oeconomia animali*, Malta, 1774. *De imperio gangliorum in oeconomia animali*, Malta, 1776.

[68] Archives 1198, fol. 97, Royal Malta Library.

[69] Archives 1198, fol. 88, Royal Malta Library.

[70] Cassar Pullicino, J., 'The Re-opening of the University in 1800', *Journal of the Faculty of Arts*, 1958, i. 144.

[71] Zammit, T., *L'università di Malta, sua origine e sviluppo*, Malta, 1913, p. 6.

1806 a practitioner obtained a degree in medicine without previous examination; he had, however, been exercising the profession of medicine since 1795 when he had been granted a licence by the Protomedicus. When the Medical Board or Committee was set up in 1818 by the Governor, Sir Thomas Maitland, the control of the final year examination passed from the hands of the university into those of this body but it was again regained by the university on the 2nd May 1825.[72] By 1821 candidates for the medical profession were required to attend the university for four years. At the end of this period they underwent a private examination conducted in Italian and a public one in Latin. The writing of a thesis in Latin was also obligatory.[73]

During the first two decades of the century only a licentiate was granted to candidates who were successful at the final examinations. For a time the licence was issued under the authority of the Governor and over the signatures of the members of the Medical Board or Committee. In 1822 the doctorate was reintroduced but the licentiate was retained, being granted to the student at the end of his studies while the doctorate was conferred upon him a year later. The licentiate was finally abolished in 1838.[74]

The former policy of the Order's Government of sending young men to study in Italy and France at public expense was abandoned by the new regime. In the early decades of the century, however, Maltese young men still continued to go abroad, though at their own expense, to pursue their medical studies. They usually went to Naples but occasionally to Great Britain.[75] It seems that the first Maltese physicians to qualify in the United Kingdom were Dr. Vincent Dionysius Portelli, who was a Licentiate of the Royal College of Surgeons of Edinburgh in 1834, and Dr. S. L. Pisani, who obtained the M.D. of Edinburgh University in August 1853.[76]

The first chairs to be organised at the university in 1800 were those of medicine, physiology and pathology. A Readership in Surgery was established in the same year at the Male Civil Hospital which had replaced the Holy Infirmary as a teaching hospital. Dr. Aurelio Badat was appointed Reader and Demonstrator in Anatomy, Surgery and Operative Surgery on the 20th November.[77] Surgical students attended daily lectures in anatomy and surgery and accompanied the senior surgeon on his ward rounds. Emphasis was laid on practical work which included the dressing of wounds, bandaging, giving of enemas, application of fomentations and cataplasms and the medication of tinea patients. Practical training in 'physick'—the performance of inunctions, cupping and bloodletting—was imparted by the Teacher of Physick.[78]

---

[72] Mifsud, A., *op. cit.*, p. 56.

[73] Hennen, J., *Sketches of the Medical Topography of the Mediterranean*, London, 1830, p. 545.

[74] Zammit, T., 'The Medical School of Malta' . . ., pp. 133–142. Zammit, T., *L'università di Malta* . . ., p. 6.

[75] *L'Arte*, 22nd March 1864, p. 4.

[76] Portelli, V. D., *A Medical Essay on Epilepsy*, Edinburgh, 1834. *The Malta Times*, 2nd August 1853, p. 3.

[77] Registro decreti-lettere, fol. 3, Medical & Health Archives, Valletta.

When Dr. A. Badat became incapable of carrying out his teaching duties owing to old age,[79] the deficiency was made good by the existence of private surgical tutors. In 1810 Dr. Agostino Naudi started to give lessons in anatomy in the cemetery of the Civil Hospital, after obtaining the sanction of the government. He continued to lecture on anatomy until 1813 when he had to give up teaching on account of the outbreak of plague in the Island. He resumed his activities in 1814 when, besides anatomy, he also taught botany, physiology, pathology and therapeutics, availing himself of the text-books approved by the university. His school was recognised by the medical authorities so that his pupils, after a regular course of studies under his direction, were admitted to the examinations and degrees of the university.[80] Naudi's fame spread to the Italian peninsula and he was invited to occupy the Chair of Medicine at the University of Naples. Another private tutor was Dr. Gavino Portelli who began delivering lectures in anatomy in 1822 following the methods of Professor Joseph Constantine Carpue of London. Thanks to his efforts an anatomical theatre was built in the courtyard of the Civil Hospital, under the auspices of the Governor, Sir Thomas Maitland, between 1822 and 1823.[81] He was eventually appointed Professor of Anatomy and Surgery at the university when the chair was re-established in the following year.

In spite of the unsettled state of the medical and surgical studies in the initial phase of the revival of the university, professional standards were not below contemporary ones elsewhere. Speaking of the medical knowlege of Maltese doctors in 1821 the Inspector of Military Hospitals of the time stated that 'physic and surgery are not on a lower footing in point of respectability in Malta than among continental nations in the neighbourhood'. Their therapeutics differed to some extent from British methods; in fact the latter were heroic for while their British colleagues employed blood-letting to a great extent, Maltese practitioners, quite rightly, held it in 'great abhorrence' and generally did not abstract more than six ounces.[82]

The teaching of forensic medicine, hygiene and pharmacology, as separate subjects, was started in 1829, 1831 and 1834 respectively.[83]

The first occupant of the Chair of Midwifery was Dr. Agostino Bonnici (1833–35) but it must be noted that the subject was already being taught since 1802 by the Lecturer in Midwifery at the Women's Hospital.[84]

[78] *Piano per il regolamento dell'ospedale di Malta*, Malta, 1802.

[79] Camilleri, D. C., *Elogio funebre del chiarissimo Dr. Agostino Naudi*, Malta, 1831, p. 18.

[80] *Il Filologo*, 3rd December 1839.

[81] *Ibid.*

[82] Hennen, J., *op. cit.*, p. 544.

[83] *University Calendar for 1939*, Malta, p. 40.

[84] Permanent Committee from 1st January 1816 to 31st December 1829, fols. 244 and 269, Medical & Health Archives, Valletta. *Piano per il regolamento dell'ospedale di Malta*, Malta, 1802.

Practical instruction in obstetrics was introduced by his successor, Professor Saverio Arpa (1836–58). When, in 1839, he made a request for the establishment of a midwifery ward for teaching purposes, the Committee of the Government Charitable Institutions turned it down on the grounds that no accommodation was available in the hospital. There was, besides, a more serious objection. 'The repugnance of women', recorded the Committee, 'to be assisted by men in their delivery is so strong and general amongst all classes that we firmly believe not one of the women who are admitted in hospital for this purpose would submit to be placed in the Clinical Ward.' In order, however, not to deny the Professor of Midwifery the opportunity to give practical instruction to his students, the Committee decided that cases of difficult delivery were to be brought to the notice of the professor 'that he might attend himself accompanied by a limited number of his pupils upon whose discretion and moral character he could depend'.[85] Apart from the establishment of wards for teaching purposes, Dr. Arpa also initiated the study of puerperal diseases and of the diseases of children in the university. He wrote a text-book on obstetrics which survives in manuscript.[86]

CRITICISM AND REFORM IN 1838

In 1832 the university was said to have become 'deficient in professors . . . and neglected to such a degree as to render instruction incomplete'. Things had not changed four years later[87] so that when in 1836 a Royal Commission was appointed to enquire into the general administration of the Island the university became a subject for their investigations. In their report, published in 1838, the Commissioners proposed that there should be five professors in the Course of Medicine to teach anatomy and surgery, medicine, obstetrics, chemistry and botany. Philosophy, hygiene, natural history and forensic medicine were also to be taught as 'minor subjects'.[88] These proposals were embodied in the 'Fundamental Statute of the University of Malta' published in 1838.

The academic course leading to the degree of Doctor of Medicine and Surgery lasted four years. Before being admitted to the course, students were required to possess the Diploma of Master of Philosophy and Arts or an equivalent certificate attesting their proficiency in Latin, Italian and English literatures; logic, mathematics and physics. The professorships were five: the Professor of Medicine, who also taught physiology and hygiene; the Professor of Anatomy and Surgery; the Professor of Midwifery; the Professor of Chemistry and the Professor of Botany, who also gave lectures on natural history and medical jurisprudence. An anatomical dissector was appointed to assist the professors. He was also charged with the formation of a collection of anatomical and pathological specimens to be preserved in the Anatomical Theatre. Professors were appointed either by nomination by the Head of the Government or by competition. They were forbidden to follow any private occupation that could interfere with their duties and they were enjoined to give every information requested by the students out of school.

---

[85] Minute Book from 13th September 1837 to 27th June 1843, fols. 107 and 114, Medical & Health Archives, Valletta.

[86] *L'Arte*, 7th July 1864.

[87] Mitrovich, G., *The Cause of the People of Malta*, London, 1836, p. 41.

[88] Cumbo, S., *Piano di Pubblica Istruzione*, Malta, 1839, p. 32.

Detailed rules were drawn up as to the way the professors were to deliver their lectures. For the text of his lectures every professor was to make use 'of a work of his own in a state ready for the press' after its approval by the Special Council. The principles by which professors were to be guided in training their students were very clearly enunciated in Article 143 of the Statute. Since the wisdom inspiring this article has lost none of its cogency after more than a century it is profitable to reproduce it in full: 'In teaching, this maxim must always be kept in sight, that the course of studies pursued at the University tends to instruct the pupils in the complete elements and general foundations of the respective sciences to which they apply themselves in order to produce the development of mature reflection by continued study and long experience; and that the principal object of such teaching is that the student, having obtained at the University a general knowledge in the abstract of the science to which he aspires, may then by his own means easily acquire a most extensive and minute knowledge of each particular branch of the same.'

At the termination of each year the student underwent an oral and a written examination, the former lasting for no less than three-quarters of an hour for each candidate. The written examination was by thesis. The subjects of between one hundred and two hundred theses were announced a month before the holding of the examination. The theses were then placed in an urn and one of them was extracted for each student, who within a period of six hours had to write a dissertation on it. Examination by theses lasted at least until 1881.[89] Obviously the word 'thesis' must not be understood in its modern connotation of an original research work.

The provisions of the 1838 Statute brought the medical faculty into line with medical schools in England. On the 10th July 1839 His Excellency the Governor, Sir Henry F. Bouverie, sent a despatch through the Marquess of Normanby to the Council of the University of London with a view to obtaining the recognition of the medical faculty of the University of Malta by its London counterpart.

'The University of Malta', he said, 'being now established upon a new, and I trust improved footing, and the fundamental statute for its guidance having been approved by Her Majesty, as signified to me in your Lordship's despatch of the 7th June last, No. 37, I take the liberty of suggesting to your Lordship that it would tend very much to encourage the students in medicine if this school were to be acknowledged by the University of London in the same way as other schools of medicine in the United Kingdom; there is every reason to hope that the schools of medicine and surgery will attain to a very high degree of perfection if encouragement be given to them; and there are several English scholars now studying here who are likely to make a figure.' A few weeks later the Senate of London University, in its sitting of the 14th August 1839, resolved to admit candidates from the medical school of Malta for the medical degree of the University of London.[90]

---

[89] Miscellanea 578 and 693, Royal Malta Library. *L'Ordine*, 11th January 1861, p. 4; 18th January 1861, p. 3.

In 1841 the Rev. T. O'Malley was appointed Rector of the University and in the following year he drew up a scheme aiming at the reorganisation of the curriculum of studies in the universities and lyceum.[91] His suggestions relating to the Course of Medicine and Surgery were meant to intensify the practical and clinical training of students. The need for the writing of detailed clinical case-histories by students and for the preservation of these documents in the archives of the hospital and of the university was emphasised. The qualifying examination for the doctorate was to take place only after the student had done three years clinical work in various departments of the hospital, stress being laid on the proviso that the examination was to be carried out 'at the bedside of the patient'. O'Malley's project, in spite of its many good points, became the object of much adverse comment and controversy. It was mainly criticised because of its financial implications and its projected prolongation of the course of studies by an additional three years.[92] Nothing came of this scheme as O'Malley's services were terminated in November 1842. No further developments took place in the programme of studies until 1849 when a few modifications of the 1838 statute were effected. The examination for admission to the academical course was made more rigorous as it had been found that 'the majority of the pupils were unqualified for professional studies owing to great defects in their previous education'. In order to ensure that the students were actually devoting 'the moderate amount of study and attention' required of them a system of monthly written examinations was established.[93]

At this period the first-year student had to spend eighteen hours a week in the dissection of the cadaver. The provision of corpses, however, was not always an easy matter. Up to 1834 only male corpses were furnished to the anatomical theatre. When in June of that year a request was made for female bodies, the Permanent Committee of the Charitable Institutions considered the application to be so unusual that they resolved that only two female corpses were to be provided from the hospital during each course of studies and that the subjects were to be over the age of forty. When in December 1835 the Professor of Anatomy complained of the difficulty in obtaining for dissection a dead woman from the age of nineteen to twenty-one years the Permanent Committee reminded him of their previous decision and explained that it had been motivated 'by the necessity of protecting the feelings, both of females admitted into hospital and their relatives, for any apprehension that female bodies could be transferred for dissection and therefore the number was limited to two subjects'. They added that 'the age above forty was specified as . . . it seemed more fitting and decent that a body of that age should be preferred to that of a younger person'. They found no reason for changing these views; on the contrary they declared themselves to be 'most strict to prevent any subject whatever, whether male or female, being granted when by any possibility the relatives can trace the body to the anatomical school'. Apart from these restrictions, however, the study of dissection was in no way hampered. Corpses were provided not only for the medical students of the university but also to qualified civilian and service doctors who wished to perfect their studies of practical anatomy or perform operations on the dead body at the anatomical theatre provided that ten shillings were paid for each subject.[94] In 1843 surgeons were availing themselves of these opportunities to practise the technique of operations on the eyes. During a period of three months in 1843–44 no fewer than twenty-eight corpses were supplied to the anatomical theatre although it appears that hopes of financial gain were partly responsible for this abundance of dead bodies. In fact one of the Commissioners of the Civil Hospital expressed his suspicion that demands for money were being made on medical men by 'some one or other of the anatomical theatre'. It had also been observed that there was a servant in the theatre who was 'very active and busy about procuring bodies'. The Commissioner was not prepared to countenance such practices although he did not object to contributions from medical men for the purchase of a box in which the remains were collected for burial after being dissected.[95] In 1856 the Central Hospital authorities were directed by the Inspector of Charitable Institutions to forward all bodies, which were not claimed after twenty-four hours, to the Professor of Anatomy.[96] To complement the studies on the cadaver 'a complete, artificial plastic collection of the whole human anatomy' and of various other anatomical models in wax was made available to the students at the Museum of the university. Papier mâché models of different stages of the development of the human ovum, of the generative organs and of abnormal forms of pelvis were also acquired.[97]

---

[90] *Papers Relating to University of London, Ordered by the House of Commons to be Printed*, 5th August 1840, p. 114.

[91] O'Malley, T., *Progetto di studi per l'università e il liceo di Malta*, Malta, 1842, p. 7.

[92] Chetcuti, T., and Zammit, N., *Rapporto ragionato della commissione incaricata dalla Società Medica di esaminare il progetto di studi relativamente alla medicina*, Malta, 1842.

[93] *Fundamental Statute of the University of Malta*, Malta, 1871, p. 67.

---

[94] Charitable Institutions, Book no. 29, fols. 194 and 280. Resolutions of the Permanent Committee from 7th July 1834 to 9th August 1836, fol. 125, Medical & Health Archives, Valletta.

[95] Letter Book from 27th May 1842 to 12th April 1847, fols. 51 and 107, Medical & Health Archives, Valletta.

[96] Charitable Institutions Inspector's Book from 24th December 1835 to 14th August 1858, fol. 23, Medical & Health Archives, Valletta.

[97] *University and Lyceum of Malta*, Malta, 1860, pp. 8 and 12. *Informazioni intorno il Liceo e l'Università di Malta*, Malta, 1865, p. 10.

CLINICAL INSTRUCTION

Clinical instruction had received attention since the early years of the nineteenth century. In 1802 medical students were doing the ward rounds with the Principal Physician and the Principal Surgeon of the Civil Hospital. The students seem to have been especially keen on attending the female surgical wards for they went there in such numbers that the surgeon was directed not to take with him the 'whole multitude' of students to the Women's Hospital but only those who were needed to assist him.[98] In 1816 the Governor, Sir Thomas Maitland, instructed the Permanent Committee in charge of the hospital administration that 'every facility must be given to young practitioners who wish to benefit themselves, as they ought to, by gratuitous attendance on the patients in the hospital'.[99] Permission 'to walk the wards' was, therefore, granted not only to medical students but also to phlebotomists, to British Regimental Surgeons and to civilian doctors who wished to gain further experience after qualifying; they were also allowed to attend at the Public Dispensaries under the direction of the medical officer in charge.[100]

Clinical wards or the Clinical School or 'Istituto Clinico', as they were also called, were founded in 1823 in the Civil Hospital by Dr. S. Grillet, the Professor of Physiology, Pathology and Medicine (1815–31).[101] They were reorganised ten years later at the request of the students and at the recommendation of the University Council. The scheme was approved by His Excellency the Governor on the 4th January 1833. The establishment of medical wards under Professor G. C. Schinas was followed, in February, by the setting up of the Surgical Wards under Dr. Gavino Patrizio Portelli, Professor of Surgery and Anatomy. Professor Portelli had expressed his wish to give 'clinical lectures on the cases' but he was not allowed to deliver his talks at the bedside of the patient except in later years when, by 1841, bedside clinical teaching had become firmly established.[102]

The clinical wards were open from the 1st October to the end of April or June of the following year, their expense being borne by the government. Although they were attached to the university and run by the professors of medicine and of surgery, administratively they formed part of the hospital organisation. Each professor had an assistant nominated by him to look after the patients in his absence. The students wrote a detailed history of the patient's illness and of its development and treatment. In the event of a fatal issue, the history was read at a clinical meeting presided over by the professor who discussed the clinical and pathological aspects of the case and tried to determine the probable cause of death. A necropsy was then performed and the professor commented upon its results in relation to the clinical manifestations. Great emphasis was laid on the educational value of post-mortem examinations. 'If the cadavers', declared Professor Schinas, 'do not speak to our ears . . . they speak with the purest sincerity to the other senses and reveal directly what the physician sought to discover in the midst of many complicating factors (for necropsy) is the best school for the practising doctor.'[103] In the surgical wards the students were instructed in operative surgery, besides history taking and methods of examination of patients. They performed operations on the living under the supervision and guidance of the professor after they had previously practised the technique on the cadaver. Accounts are on record of operations performed by students in 1841 for the treatment of inguinal hernia, for the extirpation of tumours from the eye and for the injection of hydrocele with an irritant fluid such as tincture of iodine.[104]

---

[98] *Piano per il Regolamento dell'Ospedale di Malta*, Malta, 1802, p. 3.

[99] Permanent Committee from 1st January 1816 to 31st December 1829, fol. 3, Medical & Health Archives, Valletta.

[100] Letter Book from 27th May 1842 to 12th April 1847, fols. 34, 40, 75 and 231. Letter Book from 2nd January 1838 to 28th April 1842, fols. 14 and 35. Charitable Institutions Book no. 29, fol. 39, Medical & Health Archives, Valletta.

[101] Chetcuti, T., *Al Sig. G. C. Schinas Professor di Medicina nell'Università di Studj di Malta*, Malta, 1842.

[102] Resolutions of the Permanent Committee from 3rd March 1831 to 23rd June 1834, fols. 98, 105 and 115. Charitable Institutions Book no. 29, fol. 191, Medical & Health Archives, Valletta. *Il Filocamo*, 1st and 16th December 1841, pp. 129 and 139.

Friction between the professors and the hospital administrators on the question of finance and of the indiscipline of students was a recurrent feature. The hospital purveyor was especially concerned because the professors consumed considerably more medicines than did the other medical men in charge of the general wards; indeed according to the hospital managers the clinical professors had no regard for economy in matters affecting the patients, their expenditure being qualified as 'extravagant'.[105]

Irregularities on the part of the assistants and students were another cause for complaint. The students were reported for smoking in the ward 'as if it was a common coffee-house' and for their youthful exuberance—their behaviour being so rowdy on one occasion that they broke a wash-basin 'in playing and jumping about the place'. In short the opening of the clinical wards 'destroyed all the rules of the hospital in general'. It is no surprise that the Clinical Wards were abolished in 1850, to be re-established in September 1852. Three years later the number of beds in these wards was thirty-five.[106]

On the 10th January 1867 Mr. F. V. Inglott, Comptroller of Charitable Institutions, submitted to the government a scheme for the internal organisation of the Central Hospital. Among the various proposals contained in this scheme Inglott suggested that the Professors of Medicine, of Surgery and of Midwifery should be *ex officio* the three Senior Medical Officers of the hospital—a proposal that had already been made by the Commissioners of Charity as early as May 1830.[107] The Rector of the University concurred with Inglott whose suggestion was adopted by the government and carried into effect in the following May. As the professors of the above-named subjects were bound by the university statute to give a course of clinical instruction at the hospital in their respective subjects at the conclusion of each course of studies, it is obvious that Inglott's scheme was of the greatest advantage to the teaching staff inasmuch as it placed at their disposal all the clinical material available at the hospital, and also afforded more frequent opportunities for clinical demonstrations to the students who were thus able to accompany their professors on their daily rounds in all the wards.[108] The clinical wards were thus no longer necessary and they ceased to exist.

---

[103] *Il Filocamo*, 1st November 1841, p. 117.

[104] *Il Filocamo*, 16th December 1841, p. 141.

[105] Letter Book from 27th May 1842 to 12th April 1847, fols. 103, 110, 118, 151, 152, 219 and 223. Commissioners of Charity. Letters Issued from 15th May 1851 to 4th November 1857, fol. 193, Medical & Health Archives, Valletta.

[106] Hospitals from 12th January 1849 to 31st December 1850, fol. 27. Hospitals from 22nd January 1851 to 20th June 1856, fols. 51 and 130, Medical & Health Archives, Valletta.

Some doubts were entertained regarding the advisability of admitting medical students into the maternity wards. In fact when, in 1839, students were given permission to visit the maternity wards in the company of the professor they were debarred from attending normal deliveries as the Committee of the Charitable Institutions held that in such cases there was very little to learn and that the students' presence 'about the patient's bed could consequently be both useless and indecorous'.[109] Practical instruction in midwifery remained, therefore, limited for many years to the observation of cases of abnormal labour. As these instances were relatively infrequent the students drew up a petition in 1868 in which they asked to be permitted to assist or 'at least to be present' during the normal parturitions that occurred in hospital during the nine months of their clinical course. The Comptroller of Charitable Institutions was not averse to this request but he was very cautious in allowing medical students in the labour wards as he feared that if the privacy of these wards was not jealously guarded the patients would eventually be deterred from resorting to hospital for assistance; besides, as more than one-half of the maternity cases were unmarried young women, 'who were not safe to be trusted', the presence of a *sage-femme* was insisted upon.[110]

NEW CHAIRS AND CHANGES IN THE CURRICULUM

On the 17th March 1863 Dr. T. Chetcuti, the Visiting Physician of the Lunatic Asylum, died. None of the doctors in government employment was considered qualified to fill the vacancy left by Chetcuti. To make things more difficult there was no physician in the Island who had made psychiatry his special study. Under these circumstances the Comptroller of Charitable Institutions suggested the appointment *ex officio* of the Professor of Medicine at the University as Visiting Physician of the mental hospital. In the absence of a psychiatric specialist, the Professor of Medicine was deemed to be the most suitable man to fill the vacancy as he was responsible for the delivery of a number of lectures on mental disorder and its treatment. Up to that time, however, he had no access to the mental hospital and thus was precluded from studying mental illness at first hand and also from giving clinical instruction to his students. The Comptroller's proposal was favourably entertained by the Governor with the result that Professor G. O. Galea, who then filled the Chair of Medicine, was appointed Visiting Physician of the Lunatic Asylum. It was in this way that the study of practical psychiatry became associated with a professorship although mental disorder had been a subject for examination in the academical course of medicine from as early as 1839.[111] A separate professorship in mental diseases was created in 1904.

---

[107] Charitable Institutions Book no. 29, fol. 39, Medical & Health Archives, Valletta.

[108] Letters to Government from May 1867 to March 1869, fols. 260 and 550, Medical & Health Archives, Valletta.

[109] Minute Book from 13th September 1837 to 27th June 1843, fols. 107 and 114, Medical & Health Archives, Valletta.

[110] Register of References to Comptroller of Charitable Institutions, vol. v, fol. 74, Medical & Health Archives, Valletta.

In 1878 Mr. Patrick Joseph Keenan, Resident Commissioner of National Education in Ireland, was sent to Malta to inquire into the educational system of the Island. His attention was drawn to certain defects in the medical curriculum of the university. Ophthalmology, for instance, was not taught while the diseases of children and the principles of public health did not receive adequate attention. Mr. Keenan considered that existing defects could easily be remedied by more vigorous action on the part of the Medical Council. When it is remembered that he condemned practically the whole educational set-up of the Island, it is extremely flattering to hear him declare that he was satisfied 'that the University of Malta presents, in the case of every one who obtains its Degree, a well qualified Doctor or Surgeon'.[112] While no separate chair for the study of paediatrics was ever founded and while lectures on public health continued to be given by the Professor of Forensic Medicine and Botany as late as 1919, a Professorship of Ophthalmology was set up in 1880, the very year in which Keenan's report was published.

The first to occupy the Chair of Ophthalmology was Surgeon Colonel Lawrence Manché (1846–1921). After graduating from the Malta University in 1868 he studied eye diseases in Paris under Professor E. Meyer and others. In 1875 he joined the Royal Malta Fencible Artillery as Surgeon Lieutenant. He published a number of papers on ocular affections both locally and abroad, among which a series of synoptic charts on ophthalmology for the use of students and practitioners.[113] Apart from his specialty he was a keen student of the social problems of his time being particularly interested in emigration and education, on which he contributed various communications to the local press.

---

[111] Letters to Government from 3rd January 1862 to 10th March 1865, fol. 248, Medical & Health Archives, Valletta. *Il Filologo*, 18th December 1839, p. 27.

[112] Keenan, J. P., *Report upon the Educational System of Malta*, London, 1880, p. 60.

[113] Manché, L., *L'ottalmologia in quadri sinottici*, Malta, 1885.

Since 1817 special wards had been reserved in the Civil Hospital for the treatment of eye diseases. In the last quarter of the nineteenth century these wards (one for each sex) formed part of the Surgical Subdivision of the Central Hospital and ocular affections were, therefore, treated by the Senior Visiting Surgeon. In November 1888 the Comptroller of Charitable Institutions, Sir Richard Micallef, suggested to the government the placing of these wards under the care of an ophthalmic specialist and he proposed Professor L. Manché who since 1870 had rendered his valuable assistance to the hospital as an ophthalmic specialist in an unofficial capacity. This proposal was promptly acted upon by the government and Professor Manché was appointed Ophthalmic Surgeon to the Central Hospital on the 1st December 1888. This development not only provided hospital patients with specialist advice and treatment but also made available for the students all the clinical material needed for their proper training in ophthalmology.[114]

It is interesting to trace the academic lineage existing between the Maltese Chair of Ophthalmology and that of the University of Vienna, which was the earliest chair in ophthalmology to be founded in any university and whose occupant was a Maltese oculist. The teachers of Professor L. Manché were the pupils of Professor A. Von Graefe who had been taught by Professor Jos. Beer, who was in turn the pupil and successor of the Maltese ophthalmologist Joseph Barth.

Joseph Barth, the son of Nicholas and Maddalena, *née* Sceberras, was born at Valletta in 1745. He studied anatomy under the surgeon Michel'-Angelo Grima at the Holy Infirmary whence he went to Vienna to dedicate himself to the study of opthalmology. He was brought to the notice of the Empress Maria Theresa whose son (later Joseph II) he treated successfully for an eye disease. He was rewarded by the Empress with the title of Imperial Oculist and with the Professorship of Anatomy, Physiology and Ophthalmology—the last Chair being purposely created for him at the University of Vienna in 1773. Barth wrote very little. In 1786 he published the *Anfangsgründe der Muskel-Lehre* and in 1797 the *Etwas über die Ausziehung des grauen Stars*. He died on the 7th April 1818 in Vienna where he is buried.[115]

In 1885 it was proposed to fill the four posts of Resident Medical Officers at the Central Hospital with graduates who had just concluded their courses of studies. This measure received the approval of the Government Commission appointed in 1889. The advantages of the new scheme were obvious. In fact, to quote the words of the Commissioners, 'it gave young gentlemen of the Medical Profession the benefit of considerably improving their practical knowledge by seeing and treating under the direction of their seniors a number of patients whom they would never have the opportunity of attending in the early stages of their private practice. And such beneficial effect extends to the public in general, both in case those gentlemen, at the end of their period of training in the hospital, are engaged under government; as well as in case they choose to apply themselves exclusively to private practice.'[116]

---

[114] Letters to Government from 20th April 1888 to 8th April 1895, fols. 122 and 692, Medical & Health Archives, Valletta.

[115] Manché, L., 'La prima cattedra ottalmologica', *Clinica Oculistica*, 1907, viii. *The Daily Malta Chronicle*, 17th February 1921, p. 3.

A new statute was promulgated in 1887.[117] The teaching of anatomy was separated from that of surgery, the new Chair thus created bringing the number of professorships in the course of medicine up to six. A few new subjects of studies were added while the others were redistributed among the various professors as follows: Professor of Descriptive Anatomy, Histology and Pathological Anatomy; Professor of Physiology, Pathology, Therapeutics and Clinical Medicine; Professor of Surgery and Clinical Surgery; Professor of Midwifery and Clinical Midwifery; Professor of Organic Chemistry, Practical Chemistry and Materia Medica; Professor of Medical Botany, Hygiene and Public Health, and Forensic Medicine. Final year students were required to perform laboratory work in chemistry, pathology and microscopy; they had also to examine medical and surgical patients and write out their histories in full giving diagnosis, prognosis and suggesting treatment; to carry out a surgical operation on the cadaver; and to perform an autopsy, draw up the relative report and discuss its medico-legal implications. The statute was revised in 1898.[118] The main modifications relating to medical teaching consisted in the provision that no student was admitted to the practical examination in midwifery unless he produced a certificate showing that he had attended twenty confinements; and the condition whereby students had to attend a hospital for clinical practice for an additional year after qualifying for the academic degree and before obtaining the warrant to practise the profession. This last measure, however, did not last for long; in fact it does not appear in the reprinted statute which was published with amendments in 1907.[119]

In March 1900 the visiting staff of the Central Hospital, who were *ex officio* the professors of the university, proposed to the government the appointment of a pathologist to the hospital and recommended for the post the Professor of Pathological Anatomy. This suggestion was approved and carried into effect the following year when Dr. Clo. Samut, Professor of Pathological Anatomy, was appointed pathologist to the hospital. In this way the supply of pathological material for the students was increased while, thanks to the setting up of a laboratory at the hospital, new opportunities were created for a more intensive training of students in the chemical, bacteriological and microscopical examination of pathological specimens.[120]

---

[116] Letters to Government of 20th April 1888 to 8th April 1895, fol. 664, Medical & Health Archives, Valletta.

[117] *Statute of the University of Malta*, Malta, 1887.

[118] *Statute of the University and Lyceum of Malta*, Malta, 1898.

[119] *Statute of the University and the Lyceum of Malta*, Malta, 1907.

THE TWENTIETH CENTURY

At the outbreak of the First World War practically all the members of the teaching staff of the university offered their services either locally or abroad. This offer could not be generally accepted in the interests of the civilian population of the Island. However, in spite of this limitation, there were over one hundred graduates, undergraduates and ex-students serving in the navy and in the army by 1916 besides several members of the teaching staff.[121] Some of the professors, assistant professors and lecturers in the course of medicine were attached temporarily to military hospitals, the naval medical service and the Royal Army Medical Corps both in Malta and overseas. The Aula Magna, laboratories and lecture rooms of the university were placed at the disposal of the Army Medical Staff which comprised some of the most distinguished professors from the universities of the United Kingdom. Various conferences and special courses were held by them on medical topics such as the preparation of vaccines and radiography.[122] The course of medicine was suspended from the 1st May up to the end of June 1915 when all the medical students were provisionally attached to the R.A.M.C. and employed in military hospitals.[123]

While medical studies were disrupted by the war, a new statute was laid on the table of the Council of Government on the 19th May 1915.[124] Its most important innovation was the proposal to introduce the degrees of Bachelor of Medicine and Bachelor of Surgery and of Master of Surgery, in addition to the Doctorate in Medicine which was to be raised to a postgraduate degree from a qualifying one, which it had been since 1771. Similar changes were envisaged for the courses of Laws and of Theology. The degrees of Bachelor of Medicine (M.B.) and Bachelor of Surgery (Ch.B.) were to be conferred on students after passing the examinations at the end of the course while the doctorate (M.D.) was to be granted to any Bachelor of Medicine and of Surgery who had been in possession of the latter degree for not less than one year and who had passed a practical, a written and an oral examination in Clinical Medicine. Furthermore the candidate had to submit and successfully maintain an original thesis on a medical subject. He was also to produce satisfactory evidence of having attended the medical wards of a hospital for one year or of having been engaged in practice for at least two years. The degree of Master of Surgery (Ch.M.) was to be conferred on any Bachelor of Medicine and of Surgery who had been in possession of this qualification for not less than one year and who had passed a written, a practical and an oral examination in clinical surgery, surgical anatomy and operative surgery. Moreover he was required to fulfil the same conditions laid down for the M.D. degree except that the subject of the thesis was to be a distinctly surgical one.

---

[120] Letters to Government from 10th April 1895 to 31st March 1903, fols. 406, 590, 626 and 826, Medical & Health Archives, Valletta.

[121] Report on the University 1916–17, *Malta Government Gazette Supplement*, 22nd March 1918, p. 67.

[122] *Malta Government Gazette Supplement*, 24th November 1916, p. 265.

[123] *Ibid.*, p. 265.

[124] *Malta Government Gazette*, 26th June 1915.

The thesis, as a *sine qua non* condition for the doctorate, was not a new idea in the Malta University. In fact it was first introduced and made obligatory when the university was founded in the time of the Order of St. John. According to the statute of 1898 the thesis was still obligatory for students in the Course of Literature and of Science who aspired to obtain the degree of Doctor of Literature and of Doctor of Science. In fact Article 226 stipulated that these degrees could be acquired only by Bachelors of Literature and of Science who had been in possession of the baccalaureate for not less than two years and who had presented and sustained an original thesis on a literary or scientific subject.[125] The attempt to extend the thesis system for the doctorate to the Faculties of Medicine, of Law and of Theology in 1915 was met by strong opposition on the part of the students. Their reaction, however, did not reach its climax immediately for the effect of the new statute could only be felt by the students who were to qualify in 1919. The Rector of the University tried to persuade the students that the change was meant to raise the standards of the university but they were not appeased and protests and petitions were sent to the Council of the University and to His Excellency the Governor.[126] In October 1916 a committee was appointed to examine the provisions of the statute and to ascertain whether a revision was necessary in point of principle or in detail.[127] This committee consisted of three members, one of whom resigned on becoming Chief Justice while another was prevented from taking an active part in its proceedings because of ill health.[128] The consequence was that when the war had come to an end no report had yet been drawn up. It so happened that because of economic and political circumstances the immediate post-war period in Malta was one of discontent, the unrest culminating in the rioting of the 7th and 8th June 1919. A few days earlier the university students, being still in the dark as to the recommendations of the Committee and spurred by the general feeling of uneasiness that prevailed in the Island, created a disturbance, broke some furniture belonging to the university and paraded through the main streets of Valletta.[129] The proposed reform was abandoned and the old system of conferment of degrees re-established.

---

[125] *Statute of the University and the Lyceum of Malta*, Malta, 1898, p. 35. *Statute of the University and the Lyceum of Malta of 1898* reprinted with amendments, Malta, 1907, p. 37.

[126] Saydon, P. P., 'Systems, Studies and Academical Degrees in the Royal University of Malta, *The Sundial*, 1943, iii. 210.

[127] *Malta Government Gazette*, 10th December 1917, p. 896.

[128] Report on the University 1920–21, *Malta Government Gazette Supplement*, 26th May 1922.

When Professor C. Samut, who had held the Chair of Anatomy and the Chair of Pathology since 1894, retired in January 1920, the General Council decided that the two subjects, anatomy and pathology, should be taught by different persons and accordingly two separate appointments were made. To the study of pathology was added the newly established course of bacteriology. A similar division of Chairs took place in the same period on the retirement of Professor F. Debono, who since 1890 had lectured in Natural History, Hygiene and Forensic Medicine when three different professors were appointed to teach these subjects.[130] Lecturers in Anaesthesia were established in 1928 and in Venereology and Dermatology in 1930.

In 1943 the curriculum of studies was revised the subjects being distributed over a period of five years into an Intermediate and an Academical Course of two and three years respectively. It will be remembered that in accordance with the statute of 1898 no students were admitted to the midwifery examination unless they had attended twenty confinements. Similar provisions were laid down in 1943 with regard to other clinical subjects. Thus before being allowed to sit for his final examinations every student had to submit certificates showing that he had (a) administered twenty anaesthetics under supervision, (b) attended the clinical work of the Hospital for Tuberculosis, the Isolation Hospital, the Leprosy Hospital and the Ear, Nose and Throat Clinic for a period of not less than three months, and (c) attended twenty post-mortem examinations.[131] The Royal University of Malta (Constitution) Ordinance No. XXXII of 1947 superseded the statute of 1943 but it retained, in the main, the scheme of medical studies laid down by that statute.[132]

RECOGNITION OF THE MEDICAL DEGREES AND EXAMINATIONS OF THE MALTA UNIVERSITY

In 1879 Mr. P. J. Keenan, after a survey of medical teaching in Malta, expressed the opinion that with a recasting of the medical curriculum of the university 'this little School of Medicine and Surgery might . . . be able to hold its own with any other Medical College in the British Empire and be fairly entitled to the recognition and privileges accorded to students in the Universities and Colleges of Great Britain, Ireland and the

---

[129] Reports of the Commission appointed to inquire into the events of the 7th and 8th June 1919 and into the circumstances which led up to those events, *Malta Government Gazette Supplement*, 7th October 1919.

[130] Report on the University 1920–21 . . .. *Statute of the University of Malta*, Malta, 1921.

[131] *Statute and Regulations of the Royal University of Malta*, Malta, 1943.

[132] *Calendar for the Academic Year 1956–57*, Malta, 1956, p. 89.

Colonies'.[133] This recognition by British medical institutions and bodies was obtained at the turn of the century.

In 1898 the Royal College of Physicians and the Royal College of Surgeons of England granted admission to medical graduates of the University to the Final Examination of the Conjoint Board. In the same year the General Council of Medical Education and Registration of the United Kingdom placed the University on the list of recognised Preliminary Examining Bodies with other Colonial universities. In 1899 the recognition by the Society of Apothecaries of London of the medical course of studies pursued in Malta was also ensured and graduates of the university became admissible to the examination for the diploma of the Society.

By the Order in Council of 1901 (Medical Act 1886), Part II of this Act was made to apply to Malta. In this way graduates of the university became entitled to be registered in England as Colonial Practitioners. In 1903 the university was included among the institutions from which the University of London receives certificates for degrees in medicine.[134]

Reciprocal recognition of medical qualifications was established early in 1954 with New South Wales; with the State of Victoria in 1955; with Western Australia and with Pakistan in 1957.[135] Thanks to these recognitions Maltese doctors are to be found serving in the Colonial Medical Service and in the medical branch of the Armed Forces. Others have established themselves in the United Kingdom while a few specialists have been given assignments in the Near and the Far East by the World Health Organization in connection with the control and treatment of trachoma and tuberculosis.[136]

[133] Keenan, P. J., *op. cit.*, p. 60.

[134] *Statute of the University and the Lyceum of Malta* reprinted with amendments, Malta, 1907, Appendices 5 and 7. *Calendar of the Royal University of Malta for the Academic Year 1946–47*, Malta, 1946, p. 208.

[135] *Times of Malta*, 9th August 1955, p. 8; 27th September 1957, p. 9; 4th October 1957, p. 9.

[136] *Times of Malta*, 5th January 1953, p. 6; 7th April 1954, p. 9.

CHAPTER 47

The Practice of Medicine and Surgery

LEGAL PROVISIONS

FOLLOWING the capture of Malta and Gozo from the Arabs by the Normans of Sicily in 1090 the Maltese Islands came to form part of the Kingdom of Sicily and to be governed by Sicilian legislation until the third decade of the sixteenth century. Although it is not certain to what extent the laws of Sicily applied to the Maltese Islands, there is evidence to show that the 'constitutiones' of the Sicilian rulers bearing on medical matters were observed in Malta and Gozo. In fact Sicilian influence had far from waned as late as the seventeenth century when, in accordance with a decree of the 18th June 1662 of Grandmaster Raphael Cottoner, appeal was to be made to the regulations issued by the Sicilian Protomedicus whenever doubts arose concerning the legality of provisions decreed by the Maltese Protomedicus.[1]

According to the laws of King Roger II (1101–54) an examination by the royal judges was needed before anyone was allowed to exercise the medical arts. The constitutions of Frederick II, the Suabian (1197–1250), went a step further, for they required the approval of the candidate in a public examination by the Masters of Salerno and his confirmation by the Royal Court. The course of studies was to last nine years; the first three being devoted to philosophy, the next five to the study of the medical and surgical writings of Hippocrates and Galen, and the last year to clinical practice under the guidance of a skilled physician. Surgeons had to study anatomy and that part of medicine bearing on the practice of surgery. This was the type of instruction and training that medical men practising in Malta at this period must have received. It is not known how many of them were in practice in the Island on the advent of the Order of St. John in 1530 but their number must have been small as there were not enough physicians and surgeons to staff the Holy Infirmary and to provide the medical personnel for the Order's navy. The demand was met by the engagement of foreign doctors and surgeons, who still formed a substantial section of the profession one hundred years later.[2]

---

[1] Manuscript 152, fol. 452. Manuscript 439, fol. 422, Royal Malta Library.

During their stay at Rhodes the Knights of St. John had evolved various rules and regulations aiming at the control of the exercise of certain trades, crafts and professions. These legal enactments were presumably enforced in Malta and Gozo soon after the Order settled in these islands.[3] The dispositions governing the practice of medicine and surgery are to be found in the Second Book of the *Pragmaticae Rhodie* under the title of 'De medici physicis et chirurgis'.[4] No one was allowed to practise the medical arts unless he had first proved to the satisfaction of the Chief Judge ('Castellano') that he was a graduate in medicine. After the applicant had submitted his diplomas to this legal dignitary, he was obliged to sit for an examination by the physicians of the Holy Infirmary. If he was approved by these examiners he was granted the licence to exercise his profession. Unlicensed physicians found guilty of practising medicine were fined heavily. Surgeons were not required to possess a university degree. It was sufficient for them to pass an examination in surgery at the hands of the physicians of the Holy Infirmary to acquire the right to practise their craft.

In later years the authority of issuing warrants to exercise the arts of medicine and surgery was transferred from the Chief Judge to the Protomedicus or Physician-in-Chief. This official derived his authority from the Grandmaster who conferred this right on each successive holder of the protomedical post by means of a declaration to that effect contained in the proclamation announcing his appointment as Physician-in-Chief. An instance of this procedure is to be found in the decree of the 10th June 1634 in virtue of which Dr. Nicolò Cilia was chosen to fill this post.[5]

When Dr. Giuseppe Ducosso was created Protomedicus on the 31st January 1650, a new provision concerning the licensing of medical practitioners was introduced whereby all those physicians who were already in possession of a licence from his predecessors were obliged to produce these warrants for examination and renewal. Defaulters were dealt with very severely; they were not only condemned to a term of imprisonment at the Grandmaster's pleasure but had all their wealth confiscated.[6] A further safeguard against illicit practitioners was devised some months later when, by an ordinance of the 17th August 1650, patients were expressly prohibited from seeking medical advice and treatment from unlicensed physicians and surgeons, while apothecaries were enjoined not to supply drugs and medicaments prescribed by medical men who were not in possession of the requisite licence. In order to make it clear as to who was entitled to practise, a list of licensed practitioners was published for general information on the same date.[7] This list contains the names of fourteen physicians and fourteen surgeons and represents the earliest attempt at the formation of a medical register in Malta. Identical provisions were re-enacted on the 17th October 1657 when Dr. Gio. Domenico Sceberras became Physician-in-Chief[8] and again confirmed by a decree of the 19th June 1662 by which Dr. Sceberras was succeeded by Dr. Blasio Cazzola in the protomedical office. This decree, moreover, laid down that whenever any doubt arose concerning the application of these legal provisions, the point in question was to be decided in accordance with the regulations issued by the Sicilian Protomedicus.[9]

---

[2] Manuscript 148, fol. 334, Royal Malta Library.

[3] Mifsud, A., 'I nostri consoli e le arti e i mestieri', *Archivum Melitense*, iii. 40.

[4] Manuscript 153, fol. 71, Royal Malta Library.

[5] Archives 464, fol. 386t, Royal Malta Library. Mifsud, A., *op. cit.*, p. 77.

[6] Manuscript 152, fol. 328. Manuscript 439, fol. 306, Royal Malta Library.

Besides the civil government, the ecclesiastical authorities also exercised a certain measure of control over the profession. A declaration of faith was required from physicians and surgeons before they were admitted to practise. These declarations were made in the presence of the Bishop or his delegate and were registered by a notary in the archiepiscopal archives.[10] The Maltese synodal constitutions of 1591 and 1625 obliged medical men, when called to see patients '*in lecto iacentes*', to advise the sick person to confess his sins to a priest and they were not to see the patient again after the third day unless he had complied with this injunction.[11] These conditions were not peculiar to Malta but prevailed in other Catholic countries. They were imposed by the Council of Ravenna under Pope Clement V (1305–14) and at one time the physician incurred the penalty of excommunication for transgressing them; this punishment was commuted to loss of the right to practise during the time of Pope Pius V (1566–72). The observance of these rules was being enforced as late as the eighteenth century by the Roman Synod under Pope Benedict XIII (1724–30).

Soon after his election to the Grandmastership, Fra D. Antonio Manoel de Vilhena ordered a revision of all the laws and ordinances promulgated by his predecessors. The revised code was published in 1724. The provision governing the granting of warrants was incorporated in this collection of laws but underwent no modification. In 1784, under the Grandmastership of Fra E. de Rohan, a further reform of the laws of Malta was carried out. From then onwards the acquirement of a licence was made subject to the fulfilment of certain new conditions. It was stipulated that no physician or surgeon, even when possessing testimonials and university degrees, was to be given a warrant to practise unless he had undergone a period of training at the Holy Infirmary following qualification; physicians were required to spend six years, surgeons four years and barber-surgeons two years in hospital work before they became entitled to the granting of a licence.[12] The proclamation of the 18th July 1797, issued on the occasion of the renewal in his office of the Protomedicus Dr. Lorenzo Theij, confirmed these provisions which remained in force even after the expulsion of the Order from Malta.[13] They applied not only to medical men graduating in Malta but also to those who had obtained their degrees in foreign universities and who had already undergone a period of postgraduate studies abroad.[14] These medical men were, besides, required to pass an examination at the hands of the senior physicians or surgeons of the Holy Infirmary.[15]

---

[7] Manuscript 152, fol. 334. Manuscript 439, fol. 312, Royal Malta Library.

[8] Manuscript 439, fol. 335, Royal Malta Library.

[9] Manuscript 152, fol. 452. Manuscript 439, fol. 422, Royal Malta Library.

[10] *Synodus Melivetana*, 1625, p. 5; 1646, p. 2; 1681, p. 5; and 1668, Manuscript no. 6, fol. 283, Royal Malta Library.

[11] Manuscript no. 6, fol. 103t, Royal Malta Library.

A new procedure was adopted in 1814. Government Notice of the 18th June of that year laid down that requests for the licence to exercise the profession of physician, surgeon, apothecary and midwife were to be made to His Excellency the Governor or, in his absence, to the Lieutenant Governor. The application had to be accompanied by a certficate signed by the Physician-in-Chief testifying to the good character and professional abilities of the applicant.[16] In March 1821 it was ruled that the certificate of good conduct and proficiency was no longer to be issued by the Physician-in-Chief but by the Medical Board that had been nominated some time previously.[17] This ruling was confirmed by Government Notice dated 9th December 1837.[18] In this manner the Physician-in-Chief was divested of his authority in the matter of warrants and his powers were transferred to the Governor and the Medical Board.

In 1854 that section of the Code de Rohan which regulated the practice of medicine was repealed and substituted by Chapter XIV of the Police Laws.[19] It appears that the last case to be dealt with in accordance with the Code de Rohan was that of a foreigner who was fined by the Courts of Law for practising surgery without a licence and who was imprisoned until he paid his fine.[20]

After the 31st August 1886 the licence to practise as physician was not granted unless the applicant had done medicine and surgery for at least a year after passing the final examinations for his medical degree.[21] This provision lasted until 1901 (Ordinance VII)[22] in which year it was revoked in order to bring the Maltese law on the licensing of practitioners in line with the dispositions of the Second Part of the Medical Act of

---

[12] *Dritto Municipale di Malta*, Malta, 1784, para. ii, title VI.

[13] *Collezione di bandi*, Malta, 1840, p. 41.

[14] Archives 1194, fol. 180, Royal Malta Library.

[15] Archives 1191, fol. 200, Royal Malta Library.

[16] *Repertorio di proclami*, Malta, 1844, vol. ii, p. 248.

[17] *Ibid.*, vol. i, p. 471.

[18] *Ibid.*, vol. ii, p. 251.

[19] *Leggi di polizia*, Malta, 1872, p. 41. *Police Laws*, Malta, 1883, p. 39. *Police Laws*, Malta, 1894, p. 40.

[20] Letters to Government from 9th June 1840 to 26 August 1850, fol. 28, Medical & Health Archives, Valletta.

[21] *Police Laws*, Malta, 1894, p. 40.

[22] *Malta Government Gazette Supplement*, 30th May 1901.

1886 of the United Kingdom when this Act, establishing reciprocity between Malta and the mother country, was extended to Malta. Ordinance VII of 1901 was repealed and replaced by Ordinance XVII of the same year. According to the new ordinance any person wishing to obtain a warrant to practise medicine or surgery had to satisfy the Medical Board that he was a British subject, had attained the age of twenty-one years, was of good character and possessed the degree of Doctor of Medicine and Surgery of the Royal University of Malta. Persons holding a qualification granted by a medical school other than that of the Royal University of Malta could also obtain a licence provided their qualification was recognised by the Medical Board and the applicant passed a practical and oral test in surgery, medicine, midwifery, gynaecology, forensic medicine and preventive medicine. Fulfilment of these conditions was not required in the case of practitioners whose names appeared on the Medical Register of the United Kingdom, in virtue of the Second Part of the Medical Act of 1886 which was made applicable to Malta by an order of His Majesty the King of the 26th September 1901. By this order medical men holding a warrant from the Malta Government became entitled to be registered as colonial practitioners in the Medical Register of the United Kingdom while graduates of Colonial and Dominion Universities were accorded the right to apply for a licence to practise in Malta provided full reciprocity existed between Malta and the Colony or Dominion concerned as regards the registration of the medical degree.[23] The same right was extended in 1937 to persons holding Indian medical qualifications included in the First Schedule of the same Act following the recognition of the Maltese Medical Degree by the Indian Medical Council Act.[24]

The Governor was empowered to grant a temporary licence to a foreign physician or surgeon with the advice of the Medical Board. When originally introduced in 1901 this clause was meant to afford the necessary facilities to the Maltese public to consult foreign specialists visiting the Island at a time when there were hardly any Maltese specialists in Malta.[25] The dearth of medical specialists which prevailed at the beginning of the century has long ceased to exist; apart from this, thanks to the co-operation established between Maltese and British specialists, to air transport facilities and to government help, any patient in Malta needing forms of treatment not available locally, such as radium and advanced operative techniques, is only eight hours distant from London. During the period 1956–8, for instance, more than three hundred government-sponsored patients received treatment in hospitals in the United Kingdom.[26]

---

[23] *Malta Government Gazette*, 7th October, 1901, p. 850. *Malta Government Gazette Supplement*, 3rd June 1953.

[24] *Malta Government Gazette Supplement*, 16th August 1937.

[25] Debates of the Council of Government, Sitting of the 10th January 1900.

[26] *Report on the Health Conditions of the Maltese Islands for the year 1958*, Malta, 1961, p. 142.

QUACKS AND CHARLATANS

Self-medication was much in vogue in the eighteenth century. 'Secret' and 'effective' prescriptions, with instructions as to their use and preparation, were eagerly sought for and collected. They covered a very extensive field ranging from preservatives against the plague through purgatives and tooth-cleaning powders to cosmetic applications, preparations for stimulating growth of hair and bug repellents.[27] Sometimes heroic measures were advocated for desperate cases. Cooked mice were prescribed for incontinence of urine, while the same rodent, dried and pulverised or dissolved in strong vinegar, was given for scabies. The powdered excreta of the mule were taken internally for dysentery and the urine of donkeys was used externally to stop bleeding.[28] Such remedies were popular not only among the humbler strata of the population but also among the elite and the aristocracy. In fact an extensive collection of prescriptions against the most common affections of the period—including chilblains and corns—was gathered by dignitaries of the Order of St. John for their own use in the early eighteenth century. These prescriptions fill two manuscript volumes which originally formed part of the library of the 'Camerata'[29]—a place of retreat for the more devout among the knights.

The quack never gained in Malta the notoriety he enjoyed on the continent and he appears in the records very occasionally. In March 1744 a Maronite from Gozo came to the notice of the judicial authorities for deceiving the people by selling them a preparation which, according to the Protomedicus, consisted merely of 'bad common oil, ginger and cinnamon'.[30] There was also the 'scholarly' but unqualified practitioner who, far from being regarded as a quack by his contemporaries, succeeded in gaining an aura of respectability. His fame occasionally extended beyond the confines of the Maltese Islands, as in the case of a friar of the Franciscan Order who treated all maladies by administering large amounts of iced water to his patients. Sometimes he gave them nothing but water for twenty days and even for two months—and they are said to have got well![31] Other charlatans were not so tolerated. In 1777 Dr. Ant. Cabany (or Cabanis)—a Frenchman and one of the Senior Surgeons of the Holy Infirmary[32]—wrote a pamphlet to confute a certain Vincenzo Cannarella Grimaldi who claimed to be the discoverer of an 'astringent water' with styptic properties. He was allowed to try his nostrum at the Holy Infirmary in 1776 on a case of amputation of the leg at the request of the patient

[27] Manuscript 1173, no pagination, Royal Malta Library.

[28] Manuscript 756, no pagination, Royal Malta Library.

[29] Manuscripts 251 and 252, no pagination, Royal Malta Library.

[30] Manuscript 638, fol. 1, Royal Malta Library.

[31] Geoffroy, M., *Traité de la Matière Médicale*, Paris, 1757, p. 84.

[32] Grimaldi, V. C., *Memoria per l'acqua astringente e balsamica*, Malta, 1776. Cabany, A., *Riposta alla memoria del Sig. Abate D. V. Cannarella Grimaldi*, Malta, 1777. Cabany, A., *Réponse au mémoire de Monsieur l'Abbé Dom Vincent Cannarella Grimaldi*, Malta, 1777.

himself. The experiment failed and the arteries had to be ligatured to save the patient from bleeding to death.[33]

During the political upheaval of 1798–1800 the laws regulating the practice of medicine and surgery were at times disregarded. There were persons who not only sold medicaments illicitly but even dared to pose as medical men and undertook to treat the most serious illnesses without having the necessary knowledge and qualifications. Sir Alexander Ball, the Chief of the Maltese provisional government, tried to put a stop to these abuses. On the 1st November 1799 he issued a proclamation whereby persons engaged in medical practice without a licence were condemned to a fine of twenty ounces, half of which was given to the individual denouncing the impostor while the rest was made over to the emergency hospital of St. Dominic at Rabat which was set up for the reception of civilians and soldiers taking part in the campaign against the French.[34]

The next national calamity, the plague epidemic of 1813, also produced a few impostors. In July of that year a certain Ferdinando Desalvo announced that he possessed a secret and efficacious cure against the disease. A short time previously, he had written to the Council of Health offering them his 'admirable secret indicating a curative method against the plague recorded in a very old Jewish manuscript which ensures the cure of nearly all plague-stricken persons; and another sovereign secret of the same author, to avoid catching the contagion, in use among the chief personages of Africa, Syria and Asia'. He was also prepared to declare on oath that he had tested the remedy on himself with successful results. The Council of Health, however, were not impressed by these claims; indeed they did not even deign to answer his letter. It appears that Desalvo was a somewhat shady character. In fact he had written to the Council from the Convent of St. Dominic of Rabat where, since 1812, he had been sheltering from the civil authorities under the protection of ecclesiastical immunity.[35] In spite of this handicap, Desalvo did not hesitate to write to the Municipality of Mdina about his nostrum. This body, instead of ignoring him, offered a liberal reward for his secret remedy if it proved to be efficacious.[36] Unfortunately the records of the municipality and of the convent do not tell the rest of the story and we are left in the dark as to the nature of Desalvo's treatment and of his own fate.

Desalvo was not the only one who pretended to be able to cure plague but, while he professed not to have any 'other motive except to afford some relief to the inhabitants of the Island afflicted with such a devastating contagion', others were attracted to Malta solely by the prospect of material gain. The *Giornale di Malta* of the 14th July 1813 announced the arrival of a physician, twelve persons conversant with plague and a dragoman who had been asked to come here from Smyrna to treat the disease. We also hear of another adventurer—a Jew—who held out the most hopeful promises of curing the disease. His preparation was found to consist merely of elder-flower tea and as soon as his deception was discovered he was expelled from the Island.[37]

---

[33] Archives 1191, fol. 116, Royal Malta Library.

[34] *Collezione di bandi*, Malta, 1840, p. 53.

[35] Giuliana Parte Quarta 1805–1827, fols. 140, 142 and 166, Archives of the Convent of St. Dominic, Rabat.

[36] Manuscript 183, fol. 292, Royal Malta Library.

In May 1854 a Mr. Vespa came from Italy in the company of a Dr. Pentimolli to demonstrate the action of a 'newly discovered and very powerful styptic'. He applied to His Excellency the Governor to be granted the necessary facilities to test his discovery in the presence of the medical men of the Island. His request was acceded to and he performed his experiments at the Anatomical Theatre on the 1st May 1854 on a sheep. The external carotid of the animal was severed, the styptic applied and in ten minutes the bleeding was arrested. The experiment was repeated a second time to make sure that the vessel that had been cut was actually the carotid artery and the same successful results were obtained. Two days later the artery was dissected and the wound was found completely healed. On the 12th May a report was made to the Governor who, in a dispatch to the Secretary of State, proposed sending a copy to the Royal College of Surgeons, to the Royal Society and to other associations likely to be interested in these experiments[38] but it does not appear that the matter was further considered.

The following year a foreign oculist boasted that he had pocketed no less than twelve thousand francs during his stay of three months in Malta. Another 'impudent adventurer', a certain A. Dreyfus, tried to set up in practice as an eye specialist in 1873 but he was not so fortunate. In fact the Medical Board refused to grant him the necessary licence to practise as he declined to submit to the prescribed examinations.[39]

The days of the quack in Malta are over. The law not only protects the public from the impostor but safeguards it from all kinds of illicit practitioners. The law is so strict on this point that a person offering himself to give injections on payment and on his own initiative or accepting a fee for recommending the administration of a common laxative or a popular harmless remedy is held to be practising medicine.[40]

PROFESSIONAL CONDUCT

The Rhodian laws already mentioned contemplated the regulation of the doctor-patient relationship. They made it obligatory for physicians and surgeons to answer night calls without any loss of time and also prescribed the frequency of visits which medical men had to pay to their patients; thus a physician had to see his patient twice a day—morning and evening—in the acute phase of the illness and, subsequently, once only when convalescence set in. A very serious view was taken of professional negligence. In fact if a physician was found guilty of causing the death of a patient on account of negligence he was punished as if he had been convicted of murder. Doctors were forbidden to attend any patient whom they knew to be under the care of another physician. This prohibition was enforced because it often happened that two opposite lines of treatment were pursued with serious harmful consequences to the patient.[41]

---

[37] Hennen, J., *Sketches of the Medical Topography of the Mediterranean*, London, 1830, p. 546.

[38] Despatches dated 27th May 1854, Royal Malta Library.

[39] *Il Barth*, 15th November 1873, p. 335.

[40] Harding, W., *Recent Criminal Cases Annotated*, Malta, 1943, p. 176. *Collezione di decisioni delle Corti Superiori dell'isola di Malta*, Malta, vol. xxv, Parte Quarta, p. 916.

To facilitate the course of justice in criminal matters, a proclamation of the 17th November 1586 prohibited the surgeons of the Holy Infirmary from treating, more than once, injuries caused by offensive weapons and enjoined them to report the case to the law officers within twenty-four hours.[42] When in 1640 Grandmaster J. P. Lascaris Castellar promulgated his 'Prammatiche', it was made obligatory for all physicians and surgeons to report immediately to the court authorities all persons treated by them for wounds produced by any piercing or blunt or sharp instruments. The nature and gravity of the wound had also to be declared under penalty of a fine of ten ounces for the first offence and of twenty ounces for a second offence together with the suspension from the exercise of the profession.[43] These 'Prammatiche' also governed the way in which a doctor had to write prescriptions. It is of interest to note that this provision was enacted not to safeguard the patient but to protect the apothecary. It appears that patients in those days were rather reluctant to pay the apothecary for drugs supplied to them. Quite often when the pharmacist sued the patient in court, he lost his case for want of proof that he had supplied the patient with the medicaments in question; it was, therefore, established by law that physicians and surgeons were not only to affix their signature to their prescriptions but they were also to write the name of the patient for whom it was drawn up so that the apothecary, by retaining the prescription, would possess the necessary evidence of having furnished the medicine in case the patient refused to pay for it and the matter had to be settled in court.[44]

The proclamation of the 31st January 1650 aimed, among other things, to keep surgeons and barbers within the limits of their crafts and to prevent them from invading the domain of the physician. Hence surgeons were reminded that they were debarred from exercising any medical art except their own while barbers were not allowed to bleed patients, especially women, without the previous sanction of the physician.[45] The punishment awarded to medical men convicted of administering abortifacients consisted in their being sent to the galleys as oarsmen for five years. They were also liable to other penalties prescribed by common law.[46]

---

[41] Manuscript 153, fol. 71, Royal Malta Library.

[42] Manuscript 1069, no pagination, Royal Malta Library.

[43] Manuscript 148, fol. 79, Royal Malta Library. Manuscript 439, fol. 130, Royal Malta Library.

[44] Manuscript 148, fol. 260, Royal Malta Library.

[45] Manuscript 152, fol. 328, Royal Malta Library.

In 1724 the Code of Grandmaster Antonio Manoel de Vilhena brought about a few new provisions. Physicians and surgeons who did not answer urgent calls immediately were fined forty ounces and debarred from the exercise of their profession. No physician or surgeon was permitted to compound or sell or administer any medicine himself; he could only prescribe it. Surgeons were not allowed to prescribe any medicaments apart from those required for the treatment of wounds and ulcers such as ointments, balms and emplastra, under penalty of a fine of ten ounces. Physicians were forbidden to induce their patients to acquire medicines from a particular pharmacist; the patients were to be left at liberty to buy their requirements from any apothecary they fancied. If any physician or surgeon observed any signs in his patient suggestive of poisoning he was obliged to report the case immediately to the court authorities.[47]

In 1784 the Code de Rohan confirmed these laws which remained in force for many years even after the establishment of British rule in Malta. It appears, however, that some of them were not always scrupulously observed. Surgeons came in for censure by the Head of the Government at the beginning of the nineteenth century for neglecting to report to the authorities instances of wounding which had come to their knowledge during their professional work. By their conduct they unwittingly obstructed the course of justice and shielded malefactors; for this reason the proclamation of the 15th July 1800, over the signature of Sir Alexander Ball, enjoined surgeons to a strict observance of the relevant provisions anent cases of bodily harm contemplated in the Code de Rohan.[48]

It seems that the concept of the inviolability of professional secrecy gained full recognition in 1854 when the Criminal Code promulgated in that year laid down that if any physician, surgeon, obstetrician or apothecary disclosed any secret obtained by him in professional confidence, he became liable to the infliction of a fine.

In 1901 all enactments bearing on the conduct of the medical profession were revised and modified to suit modern requirements and published as Ordinance VII and Ordinance XVII of that year.[49] The principle of the independence of the profession of medicine and surgery from that of pharmacy, already emergent in the Code de Rohan, was made definite and explicit. Previous to 1873 physicians were allowed to obtain a warrant from the government to engage in both the medical and pharmaceutical professions but with the promulgation of Ordinance

---

[46] Manuscript 439, fol. 307, Royal Malta Library.

[47] *Leggi e costituzioni prammaticali*, Malta, 1724, p. 73.

[48] *Collezione di bandi*, Malta, 1840, p. 56.

[49] *Criminal Laws for the Island of Malta and Its Dependencies*, Malta, 1854, Section 245. *Malta Government Gazette Supplement*, 30th May and 2nd July 1901.

VII of 1901 doctors were no longer permitted to exercise both professions simultaneously, except in the case of absolute necessity, or to have any interest in any pharmacy.

During the time of the Order of St. John, suspension from the exercise of the profession was resorted to for minor offences. In 1765, for instance, Dr. G. Demarco was suspended for having harmed by words the reputation of a colleague.[50] In October 1771 a Dr. E. Micallef was suspended following a verbal altercation with a priest even though the cause of the quarrel was not a medical one but simply a private affair. In September 1773 a Dr. A. M. Azzopardi was disqualified because he failed to take part in a meeting of the Academy alleging ill health as an excuse. Both of them were reinstated after some time. Other instances are on record but sometimes no reasons can be discovered for the infliction of this punishment, the relative decrees published by the government simply stating that the Grandmaster applied this measure for 'just motives'.[51]

With the promulgation of the first Criminal Code under British rule in 1854, the penalty of suspension from the exercise of the profession was limited solely to cases of medical men found guilty of procuring abortion.[52] Up to quite recent years this interdiction was a perpetual one but Ordinance XV of 1939 empowered the Governor to remove, at any time, the disability to practise.[53] The old law by which a medical man was punishable as a murderer for causing the death of a patient through carelessness in the exercise of his profession was also abrogated by this code and the penalty changed to imprisonment with a fine (sections 216 and 217). This provision has its counterpart in the civil law in virtue of which a practitioner is liable to damages for negligence and imprudence in the treatment of his patients.[54]

The law contemplates other crimes on the part of medical men which, although not connected with the practice of medicine, are attended by the disqualification to practise; these include crimes involving the death penalty or imprisonment with hard labour for offences affecting the peace and honour of families. This clause was first inserted in the Maltese legal code in 1901 at the instance of the Crown Advocate. No case had ever occurred which justified the inclusion of this clause in the code of laws, as the Crown Advocate himself readily admitted. His only argument in support of this measure was that it was not inconceivable that such instances could arise in the future. He also argued that it was the duty of the legislator to foresee possibilities and to lay down the law before their actual occurrence. An identical provision had long been enacted with regard to the legal profession (although in this case, too, there was never any occasion calling for its application). Most probably the desire to bring the medical profession in line with the legal one was responsible for the new clause. Whatever the Crown Advocate's motive, his motion was not received unanimously by the Council of Government. Two of the elected members considered that it tended to cast a bad reflection on the integrity of the medical profession and they feared that as the law was worded it could be made to include a very wide range of offences. In the view of the Crown Advocate, however, the measure, far from degrading the profession, had the effect of enhancing its honour and prestige since it aimed at the elimination from its fold of a possible unworthy member. The measure was passed by the Council (though not unanimously) after an assurance was given that it was only meant to apply to sexual offences excluding adultery and bigamy.[55]

---

[50] Manuscript 429, Bandi 1765–72, fols. 1–4, Royal Malta Library.

[51] Manuscript 429, Bandi 1756–65, fols. 28 and 30; Bandi 1765–77, fols. 1–4, 111, 166 and 215; Bandi 1772–79, fols. 64 and 115, Royal Malta Library.

[52] *Revised Edition of the Laws of Malta*, Section 257, Chapter XII, Malta, 1942.

[53] *Malta Government Gazette Supplement*, 28th March 1939.

[54] *Revised Edition of the Laws o Malta*, Section 239, Chapter XII, Malta, 1942.

In 1936 the principle was accepted that apart from criminal offences the warrant to practise could also be withdrawn if a practitioner was declared by the Medical Board to be unfit to continue to engage in his profession on account of some physical or mental infirmity.[56] Medical men who possessed a licence to practise in Malta on the grounds that they were on the lists of the Medical Register of the United Kingdom were liable to have their licence withdrawn at the discretion of the Governor on the recommendation of the Medical Board if they were struck off the Register by order of the British General Medical Council.

REGULATION OF PRIVATE PRACTICE

Before the nineteenth century doctors and surgeons were not free to exercise their profession where they wanted in the Maltese Islands. The procedure during the time of the Order of St. John was for qualified medical men to submit a petition to the Grandmaster asking for permission to be allowed to practise in a specific village or town or area. If it was considered that the medical needs of the place in question were adequately met by the physicians and surgeons already practising therein, the request was not granted. The restriction was not confined to members of the medical profession but applied also to other professional men, such as notaries, and to tradesmen. The reason behind this control on the movements of doctors, notaries and craftsmen was to avoid a concentration of professional men and skilled artisans in a few favoured places with a consequent scarcity in others and also to prevent undue competition among themselves. Once the number of doctors or surgeons in a given town or village was deemed to be sufficient a new practitioner was usually permitted to enter the district only when a vacancy occurred through the death or transfer of another practitioner. Occasionally, at the request of the residents, a private practitioner was ordered by the

---

[55] Debates of the Council of Government, Sitting of 10th January 1900, vol. xxiv.

[56] *Malta Government Gazette Supplement*, 6th March 1936.

Grandmaster to reside in a village or district where no medical men were available to treat urgent cases. By way of compensation for any hardships suffered by him through this move, he was accorded the sole right to practise in the area, all other practitioners being officially debarred from encroaching on his reserve.[57]

Some towns and villages were more coveted than others and those practitioners who aspired to settle in them usually tried to secure their future succession before the occurrence of an actual vacancy and, in order to reach this end, they resorted to expedients of various kinds.[58] Among the most favoured places in the eighteenth century was Rabat where no more than three physicians were allowed to practise. The three of them enjoyed the privilege of being on the staff of Santo Spirito Hospital and, therefore, were in receipt of a salary. The result was that whenever a new doctor desired to start a private practice at Rabat or Mdina, his first move was to elbow his way into the hospital, usually on the pretext that one of the senior men was getting on in years and becoming incapable of coping with all the work of the district. Sometimes the petitioner adduced as an argument his wish to improve his medical knowledge under the guidance of mature and experienced men such as were to be found at Santo Spirito Hospital.

The applicant did not always succeed in his aims. Sometimes his petition was only partially acceded to while at other times he gained his end at the expense of arousing the jealousy of practitioners already established in the district. In November 1791, for example, a certain Dr. F. Raynaud offered his professional services gratuitously to Santo Spirito Hospital as assistant to one of the senior physicians who was advancing in years. Dr. Raynaud's offer was accepted by the Grandmaster and by way of remuneration he was promised a post on the hospital staff when a vacancy occurred. Having thus obtained a foothold in the hospital, he began making preparations for settling in Rabat and starting private practice in that area. The other Rabat physicians, however, had been watching the stranger in their midst very closely and they immediately made representations to the Grandmaster against Dr. Raynaud's pretensions to set up a practice at Rabat. They stated, among other things, that they were all enjoying good health—obviously a retort to Dr. Raynaud's allusion to the advanced age of one of them—and that, in any case, the very small population of the district could not support four doctors. In fact, they added, if the income derived from their private practice was to be shared with another practitioner the earnings of any one of them would be reduced to a paltry sum indeed. On these considerations, the Grandmaster modified Dr. Raynaud's appointment in the sense that he was to be allowed to work only at Santo Spirito Hospital.[59]

---

[57] Archives 1190, fol. 55. Archives 1191, fol. 166, Royal Malta Library.

[58] Manuscript 181, fol. 185, Royal Malta Library.

[59] Manuscript 182 Università, fol. 199, Royal Malta Library.

Another way of ensuring a foothold in a district was to persuade a number of its residents to ask for the addition of another doctor on the grounds that the physicians already residing in the area were few in number and not always available to render immediate assistance in an emergency. The custom of locking the gates of Mdina for the night, which still prevailed at the beginning of the last century, afforded a good opportunity for this kind of stratagem. The inhabitants of Mdina depended for medical aid on the physicians who resided at Rabat and as the closure of the gates made the summoning of a doctor rather difficult during the night, they invited a certain Dr. G. F. Falzon to fix his residence among them in 1805. Dr. Falzon was only too glad to avail himself of this circumstance to enter that area and he, therefore, petitioned to be allowed to live at Mdina to be at the beck and call of the poor people of that city whom he promised to treat free of charge. The Municipality of the city, however, did not recommend his request to the head of the government for the reason that the doctors attached to Santo Spirito Hospital were serving the inhabitants of Mdina quite efficiently. These physicians, on their part, protested against Dr. Falzon's attempted invasion of their territory because they feared that an additional doctor would make it impossible for them to live with that decorum expected of their professional status. These arguments carried the day and Mdina remained without a resident doctor, but the locking of its gates was postponed to eleven o'clock while facilities were provided for the opening of the gates after that hour to permit the physician to reach Mdina from Rabat as quickly as possible.[60]

A further means of assuring a niche at Rabat and Mdina was to induce one of the physicians or surgeons on the staff of Santo Spirito Hospital to ask the Grandmaster to appoint a deputy to replace him in case of illness. This was how surgeon Giuseppe Camilleri managed to join the hospital staff. Surgeon Camilleri was not disappointed for it so happened that his chief had an apoplectic seizure some time afterwards which left him with a useless paralytic left arm; and so instead of retiring from the service because of his disability his chief agreed to allow surgeon Camilleri to take his place at the hospital on payment of half his salary.[61]

It appears that the advantages of a practice at Rabat were overrated; at least that was the experience of some new entrants in that area. Such was, for instance, the experience of surgeon M. A. Bardon. The account of his peregrinations is instructive because it gives us a good idea of the conditions under which some members of the profession had to work. In March 1776 surgeon Bardon was assigned the right of succession to surgeon Claudio Camilleri of Santo Spirito Hospital and he left Qormi, where he had been in practice, and went to live at Rabat. He soon, however, regretted this step for he found that in his new place he was unable to make an adequate income on which to support himself and his family.

---

[60] Manuscript 183 Università, fol. 114t, Royal Malta Library.

[61] Manuscript 181 Università, fol. 144, Royal Malta Library.

He, therefore, asked the Municipality to accord him a salary by way of remuneration for the loss of his practice or else to allow him to return to live at Qormi, though he was prepared to continue to attend Santo Spirito Hospital whenever his services were required; but far from accepting either of his proposals, the Municipality transferred him to Zebbug where no surgeon was living at the time. He remained in this village until 1784 when he was ordered by the Grandmaster to move again to Rabat to be within easy reach of the hospital as surgeon Camilleri had become too infirm to render further service. The difficulty of earning a living cropped up again. In April 1785 he was still waiting for surgeon Camilleri to make room for him and complaining that his clientele comprised many poor people. He was, therefore, obliged to submit a fresh demand for the grant of some kind of salary and at last he was awarded sixty 'scudi' a year during the lifetime of surgeon Camilleri.[62]

The restrictions on the movements of doctors and surgeons were removed in the early years of the British domination when all practitioners became free to reside and to exercise their profession wherever they liked.

THE STATE MEDICAL SERVICE. ENTRANCE AND PROMOTION

The practitioner who contemplated joining the government service in the time of the Order of St. John did not wait for the occurrence of a vacancy but planned well in advance of the vacation of the desired post. The usual method was to apply to the Grandmaster for an appointment as an unpaid assistant to an ageing colleague or as 'locum' to the sick holder of the post. The candidate made it clear that he was offering his services gratis with a view to the future succession to the post when it eventually became vacant. On receipt of the petition the Grandmaster referred it to the Protomedicus and a lay official (usually a knight) for their comments on the merits and abilities of the applicant. If their report was favourable the request was granted and the candidate's future in the government service assured. The offer of free services to the State on the part of aspirants to the government medical service appears odd to us to-day; but it must be borne in mind that in Malta, as late as the close of the eighteenth century, the doctor's work was still looked upon as being first and foremost a humanitarian mission and the official mind saw nothing extraordinary in such an offer. Indeed it was expected of every doctor or surgeon that he should treat the poor free of charge irrespective of whether he was a government employee or a private practitioner.[63]

Entrance into the State medical service was sometimes gained by petitioning the Grandmaster to succeed a relative who was already in government employment. Thus it was not unusual for certain posts to pass from father to son or from uncle to nephew. A case in point was the

[62] Manuscript 182, fols. 23 and 61, Royal Malta Library.
[63] Archives 1195, fol. 54, Royal Malta Library.

post of surgeon at the Gozo general hospital which, since the beginning of this institution in 1729 until the end of the century, was always held by the Speranza family from father to son.[64] One even comes across the case of another surgeon who, to ensure being succeeded by his son-in-law, gave up his post in the latter's favour.[65] Exceptionally, requests for future succession were made by candidates who had not yet qualified. Such requests were granted only on condition that the applicant agreed to provide, at his own expense, a qualified medical man to perform the necessary duties until the candidate obtained the licence to practise.[66]

Once enrolled on a permanent basis in the State service, a physician expected to start his career as a Physician for the Poor, who was the precursor of the present District Medical Officer. Being a married man or a resident in the district was considered an asset for such a post.[67] From then onwards his eye was on promotion to a more senior post and he kept a close watch on the moves of his colleagues, who were similarly on the alert, lest one of them forestalled him in staking a claim to the next senior grade, which was the naval medical service. If he remained long enough in the navy he stood the chance of becoming the Physician to the Flagship, which was the highest office that a doctor could attain in the navy. An ambitious physician, however, would not be content with that rank and he would turn to the next objective which was an appointment ashore either on the staff of the Women's Hospital or as Physician to the Slave Prison. He then sought promotion to the post of Junior Physician on the staff of the Holy Infirmary. Only those physicians who had done at least two years' practice at the Infirmary were eligible. They were first interviewed by the Grand Hospitaller and then presented to the Grandmaster from whom they received their letters of appointment.[68] Having reached this stage the Junior Physician prepared himself for a long halt in his career until he became a Senior Physician on the death or retirement of one of his chiefs. Thenceforth there was only one more rung to ascend and that was the promotion to the office of Protomedicus or Chief Government Medical Officer. As such he was usually also the personal physician of the Grandmaster, who might show his appreciation of the physician's services by remembering him in his will, as the grateful Grandmaster Martino de Redin did in 1660 when he bequeathed a slave to the Protomedicus Dr. Gio. Domenico Sceberras.[69]

The prospects for a surgeon in the State service were similar except for the final stages of his career; indeed he could never aspire to the post of Protomedicus, which was reserved exclusively for a physician. A surgeon generally started as a barber-surgeon ('*barberotto*') in one of the hospitals. Having satisfied his seniors that he was well grounded in the fundamentals of surgery, he worked for a number of years on one of the Order's ships whence he returned to the Infirmary for further training. Having given proof of his competence he became a Junior Surgeon ('*prattico*') and, following a probationary period, was granted fixed employment. His aim would then be to qualify as a surgeon to occupy the post of surgeon at the Women's Hospital or of Surgeon to the Poor ('*cerusico dei poveri*') who was the counterpart of the Physician to the Poor. Surgeons were not appointed to the hospital staff unless they were first examined and approved by the physicians of the Infirmary and by the Protomedicus in a public examination conducted in the presence of the Grand Hospitaller or his deputy. When approved, the candidates were presented to the Grandmaster, who appointed them to the posts by means of letters patent.[70]

---

[64] Archives 1195, fol. 48, Royal Malta Library.
[65] Archives 1196, fol. 118, Royal Malta Library.
[66] Archives 1195, fol. 117, Royal Malta Library.
[67] Archives 1192, fol. 13t, Royal Malta Library.
[68] Archives 1714, fol. 118, Royal Malta Library.
[69] Archives 121, fol. 77, Royal Malta Library.

The ultimate objective of the surgeon was promotion to Senior or Principal Surgeon and finally to Consultant Surgeon, Lithotomist, Oculist and Operative Surgeon and Obstetrician. The ascent from one step to another in these careers was not always a smooth one. There was much rivalry at all phases of promotion, especially in the senior grades when the path of advancement became narrower as it approached the top of the scale. To avoid unpleasant disputes with colleagues and disappointment at this critical stage of their career, it was customary for those already in the line of promotion to make doubly sure that they were not passed over in favour of some new entrant in their category; thus, for instance, when a Junior Physician was promoted to the post of Senior Physician (of which there were only three), his senior colleagues supplicated the Grandmaster to confirm their privileges, emoluments and seniority for their future 'security'.[71] In spite of this safeguard, however, the official files of the Order of St. John contain several memorials from disappointed physicians and surgeons and the expostulations and protestations of others who felt aggrieved by the advancement of a junior colleague or by the encroachment in their sphere of work on the part of a newly appointed doctor or surgeon. Similar documents are to be found in the official correspondence of the beginning of British rule.[72]

STATUS AND PROTOCOL AMONG MEDICAL MEN

The medical practitioner has always enjoyed a position of trust and respect in Malta. As far back as the sixteenth century, and indeed for many years after, the physician was accorded the imposing title of 'Excellens Doctor' or 'Magnificus et Excellens Doctor'. His humbler brethren in the profession—the surgeon and the apothecary—were given the less elevated though still proud designation of 'Magnificus Chirurgus' and 'Magnificus

---

[70] Archives 1714, fol. 118, Royal Malta Library.

[71] Archives 1194, fols. 90, 92 and 206. Archives 1195, fols. 35 and 136, Royal Malta Library.

[72] Registro Decreti Lettere, 1802, fols. 8 and 12, Medical & Health Archives, Valletta.

Aromatarius' respectively. As late as the mid-nineteenth century the physician was still being addressed as 'Excellent Doctor' in official correspondence but the surgeon had become 'Mister' by 1822.[73]

The high esteem in which the physician was held in the time of the Knights of St. John is shown by the flattering testimonials issued to members of the profession by government and also by the honours conferred upon them by the Grandmasters.[74] In 1576, for instance, the Physician-in-Chief, who already had the rank of Donat, was granted the right to wear the Cross of Devotion[75] and in 1588 the Cross of Gold. In 1777 the Senior Physician of the Holy Infirmary, Dr. Gaetano Azzopardi, was created Baron of Buleben in recognition of his work as a doctor for over forty years in the Order's medical services.[76]

Physicians, like apothecaries, notaries and advocates, were exempted from the duty of carrying arms—an obligation that was imposed on all other citizens.[77] They also enjoyed the right to have removed from their neighbourhood those craftsmen, such as smiths and carpenters, who by their noise disturbed the doctor's studies.[78]

Until the end of the eighteenth century the social and political climate of Malta was still steeped in feudalism. Jealousies as to privileges and precedence, both among individual members and among the various categories into which the profession was divided, were characteristic of the age. When, for example, the seniority of surgeon M. A. Grima was challenged by a colleague in 1776, Grima felt the need to apply to the Grandmaster for a confirmation of his seniority and of his privilege or precedence over all the surgeons in the employment of the Order in Malta. A declaration to this effect from the Grandmaster silenced all pretenders in the surgical ranks.[79] A similar measure had been taken years before (1745) by Dr. G. B. Bruno whose appeal to the Grandmaster elicited the '*declaramus oratorem esse antiquiorem*' from the Head of the State.[80] These rivalries were not limited to the medical fraternity; as a matter of fact they were widespread and for a time punctilios as to precedence and privileges embittered the lives of even the highest dignitaries in the land including the Grandmaster, the Bishop and the Inquisitor. Rivalries in the medical profession, therefore, merely reflected the social atmosphere of the time and what, at a distance of hundreds of years, appears petty and amusing to us was of extreme importance to our predecessors.

[73] Letter Book from 27th May 1842 to 12th April 1847, fol. 248. Permanent Committee from 1st January 1816 to 31st December 1829, fols. 227 and 309, Medical & Health Archives, Valletta.

[74] Archives 435, fol. 248t, Royal Malta Library.

[75] Archives 436, fol. 257, Royal Malta Library.

[76] Archives 1193, fol. 2. Archives 581, fols. 246 and 247, Royal Malta Library.

[77] Archives 429, vol. ii, fols. 24 and 130, Royal Malta Library.

[78] Zammit, T., *Valletta—An Historical Sketch*, Malta, 1918, p. 72.

[79] Archives 1192, fol. 187, Royal Malta Library.

[80] Archives 1189, fol. 69, Royal Malta Library.

Before the close of the seventeenth century protocol among doctors and surgeons had been regulated in accordance with tradition and the dissensions that arose up to that time had always found an amicable settlement. It seems, however, that difficulties occurred in 1699 which could not be satisfactorily resolved as in the past. In fact the Protomedicus, Dr. Archangelo Grech, was compelled to have recourse to the head of the government.[81] He submitted to Grandmaster Raymond Perellos that the absence of regulations with regard to the 'order of precedence among the physicians of our domain was causing various dissensions among them not without prejudice to that well-being which they are bound to promote and preserve with the help of God'. To remedy matters the Grandmaster issued a chirograph dated the 12th June 1699 in which he laid down the order of precedence and procedure to be observed by physicians and surgeons 'in all the academies, colleges, consultations and all other functions, whether public or private, when sitting, talking, prescribing, writing, affixing signatures or performing any other act of any kind'.

As supreme head of the profession the place of honour was bestowed on the Protomedicus or Physician-in-Chief. He was immediately followed by retired protomedici, who thus preceded all other doctors even though some of the latter happened to be their seniors in age. Precedence among the protomedici themselves was regulated in accordance with their dates of appointment to the protomedical office. The Senior or Principal Physicians of the Holy Infirmary came next, seniority among them being reckoned by the number of years they had been in the service as Senior Physicians. The same procedure applied to the Junior Physicians when they deputised for their seniors. The third and fourth places belonged, respectively, to the Physician of Santo Spirito Hospital and of the Gozo Hospital; then followed the Physician to the Poor of Valletta, the Physician to the Women's Hospital, the Physician of the Slaves Prison and the Physicians to the Poor of Vittoriosa and Senglea. Next in the medical hierarchy was the Physician to the Galleys. When he was afloat he was vested with the authority of Protomedicus and when attending ceremonial functions in the area of Marsamxett Harbour he ranked next to the Physician of the Gozo Hospital. The Junior Physicians of the Infirmary and, finally, the private practitioners of the two islands held the lowest place in the list of precedence. These arrangements underwent no change until the end of the Order's domination in Malta except that when the post of Physician to the Poor was created for Bormla its holder became entitled in 1791 to occupy the position next to the Physicians of Vittoriosa and Senglea.[82]

Graduation among surgeons was on the same lines as among physicians. Surgeons, however did not enjoy the same social and professional standing as the physicians; in fact they had inferior status and, in some ways, were subservient to the physicians. Thus in 1729 the surgeon of St. John's Hospital of Gozo had to perform, besides his own professional duties, the work of barber and of clerk and was also expected to keep a note of 'all that was ordered by the physician'.[83] In a gathering of physicians and surgeons the latter were not allowed to precede the physician even when they happened to be 'veterans and very skilful in the art of surgery'. This was in line with the custom by which, since early times all over the western world, the practitioners of medicine and of surgery constituted two separate and distinct professional classes which came close together only at the commencement of the nineteenth century when the academic and social barriers between the two groups began to disappear. Until then the surgeon hardly received any scholarly education, although there were a few practitioners who were qualified in both medicine and surgery;[84] in spite of their double qualification, however, they were allowed to practise only one of the two arts and if the individual chose surgery as his profession he forfeited all the rights and privileges of the physician.[85] Until 1828, and possibly even later, young men could choose to study surgery without following an academic course in medicine. They were trained in surgery by the Principal Surgeon of the Civil Hospital and were examined by the Medical Committee or Board for approval as Assistant Surgeons or as fully fledged Surgeons.[86]

---

[81] Archives 1714, fol. 153, Royal Malta Library.

[82] Archives 1198, fol. 10, Royal Malta Library.

In the time of the Order the surgeon usually started his career in the barber's shop whence he entered the Holy Infirmary to undergo a period of apprenticeship as barber-surgeon. He afterwards enriched his experience on the battlefield or on board one of the Order's ships. After a further period of training at the Infirmary he qualified as a surgeon but he rarely did major operations, confining his work to treating wounds with oil and cautery, extracting bullets and other foreign bodies, setting fractures and performing amputations. Only very experienced surgeons attempted internal operations such as trepanning of the skull and cutting for stone. The surgeon never escaped the control of the physician; thus in the case of patients entering the Holy Infirmary it was the Senior Physician who decided whether a case was medical or surgical, in which ward he was to be cared for and when he was to be discharged from hospital. The surgeon was consulted about the kind of treatment to be carried out but if the physician happened to disagree with him the question was settled by a joint consultation of the medical and surgical staff of the Infirmary.[87] These consultations were conducted in accordance with certain fixed rules. The first to speak and to give his views as to diagnosis and treatment was the physician or surgeon attending the patient. The next to express an opinion was the most junior member in the gathering, to be followed by the one who was nearest to him in seniority and so on until everyone present had tendered his opinion.

---

[83] Archives 533, fol. 179, Royal Malta Library.

[84] Archives 1198, fol. 80, Royal Malta Library.

[85] Archives 1196, fol. 29, Royal Malta Library.

[86] Permanent Committee from 1st January 1816 to 31st December 1829, fol. 199, Royal Malta Library.

[87] Archives 1714, fol. 127, Royal Malta Library.

Just as the physician considered it below his dignity to perform surgical operations, so the surgeon would not stoop to such lowly procedures as blood-letting, cupping and drawing of the teeth. Such work was considered to be too commonplace and was in fact known as 'low surgery' ('*bassa chirurgia*'). It was left in the hands of another class of practitioners—the phlebotomists and barbers. Before beginning to practise, barbers had to be examined and approved by the Protomedicus, who granted them a licence that was registered with the judicial authorities. The barbers of those days seem to have been very enterprising and versatile persons. Indeed, apart from surgery and the art of hair-dressing and beard shaving, they also engaged in the most diverse and unexpected occupations. In 1749 we come across one of them from the village of Birkirkara who successfully applied to the government to be allowed to work also as a shoemaker and to sell tobacco, alcohol, dried fruits, vegetables, bird-seed and even nails.[88] Another barber from Zebbug was granted the licence, in 1773, to operate a flour-mill and a bakery, to trade in cotton, grain and livestock and also to keep a butcher's shop.[89]

The professional kinship of the physician and surgeon with the hairdresser and wigmaker lasted for several centuries. In fact the definite separation of the barbers from the medical fraternity did not occur in Malta until the end of the eighteenth century. Since medieval times in Malta, as elsewhere in Europe, all the artisans engaged in a craft or art combined together to form an association or guild to protect their own economic interests, to maintain a high standard of workmanship, to train apprentices and examine them before they were licensed by the State as competent artisans. The head of the guild or college, as it was also known, was the Protomagister or Consul. These associations had a religious basis and in Malta they were organised into confraternities each of which bore the name of the saint protector of their craft; thus the carpenters formed the guild and confraternity of St. Joseph and the jewellers that of St. Helen. The meeting place was usually the sacristy or oratory of the church where their patron saint was venerated.

The association of the medical practitioners and barbers was the Guild of the brother Saints Cosmas and Damian. This guild had an altar, which is still in existence, dedicated to the two saints in the church of St. Francis in Kingsway, Valletta. The altar-piece is a painting by Filippo Paladini (1544–1614?) and bears the date 1612. One of the saints is depicted as carrying a book in one hand while his brother holds an ointment or medicine box with small partitions one of which contains a bone elevator. On a shelf by his side is the 'triploide', an instrument used for the elevation of depressed fragments of bone from the skull. In the foreground, to the left, lies the patient with a bandage round his head.

---

[88] *Dritto Municipale di Malta*, Malta, 1784, p. 299. Manuscript 180 Università, fol. 31t, Royal Malta Library.

[89] Manuscript 181 Università, fol. 104, Royal Malta Library.

The saints' feast was celebrated with great pomp and solemnity on the 27th September. The members of the medical profession and the barbers, wearing the tunics of their confraternity, walked processionally from the conventual church of St. John to the church of St. Francis where relics of the two saints were venerated. These celebrations were already in existence in 1644[90] and were still being held as late as 1857 when the feast day of the two saints was kept as a holiday by physicians, surgeons and apothecaries.[91] Until the end of the eighteenth century a religious ceremony was also held at the Holy Infirmary where high mass was sung in the presence of the Grandmaster, the celebration taking place in the Ward for the Wounded where there was an altar in honour of the two saints.[92]

The first move in the secession of the hairdressers from the medical profession was taken in October 1720 by the barbers and the wigmakers themselves when they petitioned the Grandmaster to permit them to have one of their colleagues as their own Protomagister. This request was prompted by the need felt by the wigmakers to have an experienced Consul to whom they could refer, for settlement, all disputes concerning the quality and manufacture of wigs. Their request was granted by the Grandmaster and their new statute was drawn up by three government officials, one of whom was the Physician-in-Chief as the representative of the Guild of SS. Cosmas and Damian; however, complete division of the hairdressers and wigmakers from the medical profession did not occur until 1797 when by a government decree of the 3rd June of that year the barbers were incorporated into a new independent guild under the patronage of St. Ludovicus, King of France.[93] In spite of this constitutional change, however, the barbers continued to perform such minor operations as teeth extraction and blood-letting for many years afterwards. A reminder of the barber's medical past as blood-letter still survives in the pole striped in red and white over his shop, the fillet round the pole symbolising the bandage encircling the patient's arm. As regards the phlebotomists, there were still three of them practising in Valletta in 1850[94] and it was not until 1921 that they disappeared from the list of medical practitioners recognised by the Second Sanitary Law.[95]

THE MALTESE MEDICAL ACADEMY

In the cultural, scientific and medical fields the seventeenth century was characterised by the appearance of learned societies or academies, as they were called, in various places in Europe such as the 'Accademia dei Lincei' of Rome, the French Academy and the Royal Society of London. The Maltese Medical Academy was formed in the last quarter of the century. It owed its origin to the outbreak of plague in 1675. It has already been told (Chapter 18) how the Protomedicus Dr. G. D. Xiberras had diagnosed the epidemic of that year as plague, how the government preferred to rely on the contrary view of a certain Dr. Giuseppe del Costo that the pestilence was not plague and how subsequent events proved that Dr. Xiberras was right. A few years after the cessation of the epidemic, the Professor of Anatomy and Surgery, Dr. Giuseppe Zammit, realising how harmful the divergent opinions of medical men can be to the community in matters concerning the public health, proposed to the Grandmaster the establishment of a medical academy or society to enable all practitioners to meet periodically and discuss the diseases that happened to be current in the Island. Dr. Zammit's proposal was approved by Grandmaster Nicholas Cottoner and the academy was founded in 1679 with Dr. Zammit as its first president.[96] It was placed under the patronage of the Grand Hospitaller and the Infirmarian of the Holy Infirmary of Valletta.

---

[90] Cagliola, F., *Almae siciliensis provinciae*, Venetiis, 1644, p. 121.

[91] *Muir's Almanack for 1845*, Malta, no pagination. *Muir's Almanack for 1857*, Malta, no pagination.

[92] Manuscript 142 E, fol. 309, Royal Malta Library.

[93] Archives 1186, fol. 277. Archives 1198, fol. 93, Royal Malta Library.

[94] *Almanacco di Malta per l'anno del Signore 1850*, Malta, p. 70.

[95] *Malta Government Gazette Supplement*, 13th May 1921, p. 126.

Definite rules governing the conduct of the affairs of the academy were established for the first time in 1699 during the Grandmastership of Raymond Perellos. Physicians and surgeons met in conference every Wednesday in the library of the Infirmary and discussed medical and kindred subjects while the hospital staff read the case-histories of patients under their care. The meetings were open to the literary coterie and intelligentsia of the Island and many of the knights attended them. The secretary of the academy was a knight who, besides keeping a record of the proceedings, was also in charge of the library. The academy prospered and gained such a good reputation that foreign doctors passing through Malta on their way to and from the Near East made it a point to attend its weekly conferences. The president was known as '*lettore*' (literally 'reader') and bore the high sounding title of Prince of the Academy. It became the prerogative of the Professor of Anatomy and Surgery to hold the chairmanship of the academy from its inception until 1813, when the society came to an end during the plague under the presidency of Professor Aurelio Badat.[97]

The subject for discussion at each meeting was chosen by the president, who announced it to members a week in advance to enable everyone to study it beforehand. The meeting was opened by the most junior member present; then the rest followed him in order of seniority '*gradatim et per turnum*'. Every member was obliged to contribute to the discussion with the exception of the Protomedicus, retired protomedici, the senior staff of the Infirmary and their assistants. The debate was to be conducted, under the guidance of the president, 'with all modesty and pleasantness and politeness so that both the exponents and their opposers would be worthy of praise and applause and not deserving of the penalties reserved to the Protomedicus'.[98]

---

[96] *Storia della Società Medica d'Incoraggiamento di Malta*, vol. i, Malta, 1845, pp. iii–iv.

[97] *Ibid.*, pp. vi and viii.

No member of the medical and surgical fraternity dared to neglect participating in the activities of the academy under such an autocratic and all-powerful regime as that of the Order of St. John especially when, in later years, Grandmaster Emanuel Pinto and his successors made it clear that those physicians and surgeons who failed to attend the academy's conferences or to read papers incurred the Grandmaster's displeasure. We have already referred to an instance when a physician was suspended from the exercise of his profession because he absented himself from one of the academy's meetings alleging ill health as an excuse. He was reinstated after two months but only after the Protomedicus had certified that the physician had, since his suspension, punctually and diligently attended the meetings and had contributed to the discussions of the academy.[99]

SALARIES

When considering the salaries paid to the medical practitioner during the last three hundred years, no precise base-line can be established for comparison with present financial and economic conditions on account of the changes in currency and in the value of money that have occurred during this length of time and on account of the totally different economic structure then prevailing; however, in spite of these drawbacks, it is possible to form a general idea of the pattern of remuneration enjoyed by medical men at various epochs and to see that, in contrast to their flattering social position, their rewards for services rendered were, on the whole, meagre.

The lowest professional employees in the service of the Order of St. John were the student barber-surgeons whose earnings during their first three years of service and practical training at the Infirmary consisted of three daily loaves of bread of eight ounces each. In the fourth year they received five 'grains', i.e. a half-penny a day and subsequently one 'carlino' or about one penny daily from the fifth year onwards until they qualified as barber-surgeons,[100] of whom there were four on the establishment of the Infirmary. In 1682 their salary was three-halfpence a day with the prospect of obtaining a further half-penny after completing the seventh year of service. At the end of ten years they received twopence half-penny a day. In consequence of these poor rewards, barber-surgeons sought to leave the service of the Infirmary, before they had been adequately trained, for more lucrative employment on board merchant vessels. The result was, in the words of a contemporary official document, that they remained 'in perpetual ignorance of their craft and consequently unable to render a good service to the public'. To remedy matters it was decided to accept barber-surgeons for training only on condition that they did not relinquish their posts at the Holy Infirmary before a period of ten years under the penalty of corporal punishment as determined by the Grandmaster.[101] A century later there were six barber-surgeons on fixed employment with a maximum salary of sixpence half-penny a day.[102]

---

[98] Archives 1714, fol. 153, Royal Malta Library.

[99] Manuscript 429, Bandi 1772–79, fol. 64, Royal Malta Library.

[100] Archives 646, fol. 162t, Royal Malta Library.

The salary of a physician at the Infirmary up to 1779 was 250 'scudi' or about £21 a year and the gift of two hens, while that of a surgeon was just over £19. In January 1780, following a petition for a revision of the scales of salaries by the medical and surgical staff of the Infirmary, the salary of a physician was raised to £25 and that of a surgeon to £21. A further rise was effected in 1796 when the senior physicians and surgeons were paid approximately £30 a year while their assistants received between £14 10*s*. and £16 13*s*.[103] Foreign medical experts called to Malta to tender advice in some special emergency were much better paid; thus Dr. Pietro Parisi, who came to Malta during the plague epidemic of 1592, was given about £25 a month—almost as much as was given to a Maltese physician in a year two centuries later.[104]

Apart from their salary, surgeons received extra remuneration for the performance of certain operations. In 1725 the Senior Surgeon and Lithotomist was paid about seventeen shillings by the Treasury for every operation done for the removal of urinary calculi. In 1730 he applied for a further grant of just over sixteen shillings for every cataract operation he performed in view of the 'special skill' involved in its technique. The Treasury was very reluctant to grant the amount requested but finally agreed to fix a fee of eight shillings for every operation on condition that payment was to be made only if the operation was successful and the patient cured.[105] It was only fifty years later that the fee was raised to about seventeen shillings and the condition as to the success of the operation waived.[106]

Besides their salary the professional staff of the Infirmary were also allowed rations consisting of three-fourths to one '*rotolo*' of meat (about one pound), three loaves of bread and one pint of wine; in some cases quarters at the hospital were also provided. How much these emoluments in kind meant to the recipient in those days and how deeply they affected his life may be judged from the fact that, when they were abolished by the government in 1778, the Senior Surgeon of the Infirmary, Dr. M. A. Grima, stated to the Grandmaster that it was his daily ration of meat and wine that induced him to introduce the teaching of operative surgery on the cadaver at the Holy Infirmary. Dr. Grima was entitled to these items

[101] Archives 646, fol. 162t, Royal Malta Library.

[102] Archives 1714, fol. 146, Royal Malta Library.

[103] Manuscript 377, fol. 169, Royal Malta Library.

[104] Parisi, P., *Aggiunta agli avvenimenti sopra la peste*, Palermo, 1603, p. 136.

[105] Archives 649, fols. 20t and 173, Royal Malta Library.

[106] Archives 160, fol. 282, Royal Malta Library.

of rations as holder of the Chair of Anatomy and he asked that he should, at least, continue to receive their money value in lieu. His request was granted but only in view 'of the dangers attendant on his work (as dissector) as instances occurring at the Infirmary had shown'.[107]

That the rates of remuneration in the government service were low, was admitted by no less a person than the Head of the French Secretariat of the Order himself. Apart from this admission, enough evidence can be gathered from the collection of petitions addressed to the Grandmasters which shows that, on the whole, medical practitioners did not make much money in the eighteenth century and that even those who were at the head of their profession found themselves in serious financial difficulties in their old age. Dr. G. Locano, for instance, who was one of the most renowned physicians of his day, owed over £7 for rent to the Treasury. In a petition to the Grandmaster in May 1791 he declared himself unable to pay this amount and humbly begged to be granted the opportunity to pay it by instalments at the rate of thirty-three shillings a year. His request was acceded to on condition that he paid his first instalment immediately.[108] A similar application from the surgeon Michele Grillet—one of the foremost of his time—records that he owed forty-one shillings for rent to the Treasury. He had served the Order of St. John for fifty years in his capacity as surgeon but an illness of two years' duration had reduced him to such financial straits that he was incapable of settling his debt; in fact, because of his lack of money, he 'was obliged to live in continuous economy' in order to make both ends meet and that was the reason why he petitioned the Treasury Commissars to allow him to pay his rent in small instalments, which were eventually fixed at eight shillings a year by the Treasury.[109] If such was the plight of the more prominent members of the profession towards the close of the eighteenth century, we can imagine how their less successful colleagues must have fared. The reason for the low salaries paid to the government medical officers was officially attributed to the 'painful circumstances' of the Treasury 'which not only did not permit any increase in expenditure but imposed the most rigorous reductions'[110]—a theme which, with minor variations in wording, is still heard to-day.

The beginning of British rule in Malta in the opening years of the nineteenth century witnessed a rise in the cost of living and the wages of all hospital employees were increased. The salaries of the medical officers of the Valletta hospitals were doubled but, compared with those of the lay staff, the difference between the two categories was not very great. By way of illustration it may be mentioned that the Junior Physician and the Junior Surgeon received only £8 a year more than the cook and the

[107] Archives 1193, fol. 77, Royal Malta Library.

[108] Doublet, P., *Mémoires Historiques sur l'Invasion et l'Occupation de Malte*, Paris, 1883, p. 75.

[109] Archives 660, fol. 231, Royal Malta Library.

[110] Archives 1198, fols. 76 and 77, Royal Malta Library.

sexton.[111] The salaries of the professional staff of Santo Spirito Hospital were also raised but not to the same extent as those of the Valletta hospitals. It is not to be wondered at, therefore, that the physicians and surgeons of Santo Spirito Hospital never ceased in their efforts to raise the ceiling of their honorariums whenever the occasion presented itself; but these opportunities were infrequent, being usually provided by the demise of a retired member of the staff, when his successor would ask for an increase in his salary out of the pension enjoyed by the deceased colleague. The Municipality of Mdina, however, was against the granting of further increments in the pay of the hospital staff so that when in 1806 one of the surgeons petitioned for a rise in salary the Municipality, far from recommending it, submitted to the Head of Government that the granting of the surgeon's request 'would constitute an example and at the same time provide an occasion to the other hospital officials, and especially the physicians, to ask for further new increments for themselves . . . which circumstances would considerably prejudice' the Treasury of the Municipality and the state of the finances of the hospital. They also stated that as the professional staff enjoyed private practice they were in a position to augment their incomes through private work.[112]

That the pay of Government Medical Officers was not proportionate to their duties was amply recognised by the third decade of the century. The need for a revision of salaries was repeated in succeeding years. A few instances will be given. In 1826 the Police Physician of Valletta who, besides clinical duties, was entrusted with much of the work now carried out by Sanitary Inspectors, had a salary of about £12 12*s.* a month. He was also saddled with the 'troublesome and responsible' duties of Quarantine Physician for which, however, he received no remuneration. Mr. J. Richardson, who was then in the Island to report on the laws of Malta, fully recognised that a doctor occupying such a post was 'fairly entitled to some encouragement by way of increase of salary' in view of the variety, extent, importance and responsibility of his work.[113] In 1870 another British observer, commenting on the salary of £150 a year received by a whole-time medical officer in government employment, remarked that this sum was 'hardly sufficient to tempt anyone to become a disciple of Galen who is not influenced by some higher motive than that of gain'.[114]

By 1874 the number of Maltese physicians had diminished from one hundred and twenty in 1838 to eighty although the Islands' population had increased by thirty thousand souls. Commenting on this dearth of doctors, the editor of the medical journal *Il Barth* ascribed it to 'the little encouragement offered to doctors who are very badly rewarded'.

---

[111] *Piano per il regolamento dell'ospedale di Malta*, Malta, 1802, pp. 4, 6 and 12.

[112] Manuscript 183 Università, fol. 130, Royal Malta Library.

[113] Richardson, J., *Reports on the Laws of Malta*, 1826, fols. 35, 128 and 139. Property of Dr. A. Ganado, LL.D., Valletta.

[114] Seddall, H., *Malta Past and Present*, London, 1870, p. 289.

University students preferred to join the law courses as there were more openings for legal men and the posts were quite lucrative. This state of affairs was also responsible for the deplorable lack of 'specialists in all branches of medical knowledge' at this period.[115] Five years later, Sir Penrose Julyan, who was sent to Malta to report on the civil establishments of the Island, declared that resident physicians should 'be paid adequately for the duties they have to perform' and should 'have a prospect of superannuation after their term of useful labour is exhausted'.[116] The position had not changed substantially by the early years of the present century. In his evidence before the Royal Commission of 1912 the Rector of the University, after stating that the commencing salary of a District Medical Officer was £60 a year, qualified this sum as being 'a mere allowance from the government because really it is beneath the professional man'.[117] In spite of all this frank criticism, the question of salaries became a perpetual one and dragged on through no less than one hundred and fifty years.

PENSIONS

Prior to 1777 no pensions were granted by right to medical men in State service. To make up for this deficiency a sort of pension scheme had been evolved by the medical and surgical staffs themselves. The arrangement consisted in the junior physicians and surgeons forfeiting part of their salary and making it over to their seniors when the latter retired. The amount surrendered was, sometimes, as much as half the salary.[118] This system, according to the Treasury Commissioners, led to abuses because senior doctors and surgeons retired from the service at a relatively early age when they were still physically fit to render further useful service and bestow the fruits of their long experience on the patients in government hospitals. They were quitting their posts in favour of the junior men who, by way of compensation, agreed to pay them a pension from the salary as already stated; this usage was, therefore, prohibited by the Treasury in 1777 although it had not yet completely disappeared by the second decade of the nineteenth century.[119] The Treasury recommended the granting of pensions out of government funds to those members of the medical profession who had been in the State service for a sufficiently long time and who had reached a mature age.[120] No age limit or period of service was fixed and each case was considered on its own merits.

Usually the amount granted as pension was equal to half the salary but as no special provision was made with regard to funds, the government had to find ways and means of procuring the money as the occasion arose without, if possible, aggravating the Treasury. Thus when a pension, equivalent to half his salary, was given to Dr. M. A. Grima in 1797 the necessary money was obtained by suppressing the post of Senior Surgeon of the Women's Hospital so that, by saving the salary attached to this post, the government was able to pay Dr. Grima the pension without burdening the Treasury with any additional expenditure.[121] Occasionally one comes across a case, in the early years of the nineteenth century, where the amount of pension was equal to the salary itself; but the pensioner was still obliged to do some work for the government. Thus when Dr. Salvatore Bernard, the Principal Physician of Santo Spirito Hospital, retired after fifty years service at the age of seventy-seven, he was granted a pension equal to his salary (approximately £12 10*s*.) but in view of his extensive medical experience, as the government put it, the condition was imposed that he was to continue to render his services to the hospital in a consulting capacity as long as his health permitted him to do so.[122] It must not be assumed from Dr. Bernard's case that the government was lavish with pensions at this period. The surgeon Stefano Borg enjoyed a pension of only 13*s*. 4*d*. a month after thirty years service with the Order of St. John. As he could not live on such a meagre sum he asked to be re-employed when the post of surgeon fell vacant at Santo Spirito Hospital in 1801. This post carried a salary of only 16*s*. 8*d*. a month so Borg pleaded to be allowed to retain his pension as well as otherwise he 'could in no way support himself . . . being burdened by a wife and eight children'. It is pleasant to record that his request was granted.[123]

---

[115] *Il Barth*, 4th April 1874, p. 399; 9th March 1872, p. 110.

[116] Julyan, P. G., *Report on the Civil Establishments of Malta*, London, 1880, p. 54.

[117] *Royal Commission of 1912, Minutes of Evidence*, London, p. 172.

[118] Archives 1190, fol. 77, Royal Malta Library.

[119] Permanent Committee from 1st January 1816 to 31st December 1829, fol. 193, Medical & Health Archives, Valletta.

[120] Archives 660, fol. 175, Royal Malta Library.

The first regular pension scheme, from which present pension arrangements are derived, was established in 1802. Members of the hospital staff became entitled for a pension, equal to half their salary, after thirty years service but earlier retirement on reasonable grounds was also allowed, the pension being determined in each particular case.[124]

FEES

In accordance with the early enactments of the Order of St. John the amount of the fee due to medical men was determined not by the number of visits paid to the patient but by the duration of his illness. The honorarium allowed to surgeons was, in general, less than that of physicians. At first the actual sum due to a doctor or surgeon was decided upon by the 'Castellano' or Chief Justice but in the seventeenth century the fixing of fees was entrusted to the Protomedicus.[125] The custom of calculating the

[121] Archives 1198, fol. 76, Royal Malta Library.

[122] Manuscript 183 Università, fol. 34, Royal Malta Library.

[123] *Ibid*., fol. 32.

[124] *Piano per il regolamento . . .*, p. 16.

[125] Manuscript 153, fol. 71, Royal Malta Library.

fees by the length of the patient's illness was abandoned and the practice of payment per visit was adopted. The legal code of Grandmaster Ant. Manoel de Vilhena of 1724 fixed the rate at one 'tari' (about one penny three-farthings) for a day visit and four 'tari' (about seven pence) for a night call. The fees, however, had to be collected at the end of treatment.[126]

The rates of fees laid down by the Vilhena Code remained in force for many years. A new tariff was officially approved in 1821 by Government Notice of the 28th March when a maximum fee of ten pence halfpenny for a day visit and about 4*s.* 2*d.* for a night visit was sanctioned. The maximum fee for a consultation was 8*s.* 4*d.* No fixed rates were established for dressing a wound, setting a fracture and major operations but the amount was to be decided upon by the Medical Board according to the circumstances of the case and the time employed in the various treatments; however, a scale of fees was published for other procedures such as the application of vesicants and leeches, blood-letting, introduction of catheters, reduction of hernias and the issue of medical certificates. These official rates were regarded as being too unremunerative by British and foreign medical men practising in the Island at the time and they, therefore, charged higher fees.[127]

The tariff was re-published in 1859.[128] The rate for an ordinary visit was one shilling, an amount which was considered to be an 'insult' to the profession by a British visitor. The suggestion was made—not by the profession—to do away altogether with the legal tariff and to allow the fees to find their own level in accordance with the increasing money values of the time.[129] This suggestion was ignored and for many years the official tariff remained unchanged and the professional earnings were so poor that the few practitioners who succeeded in reaching the head of the profession rarely realised £300 a year—a sum which by contemporary standards was regarded as being a 'very moderate' one. The rest had no prospects before them 'but starvation or at least genteel begging'.[130]

The Royal Commission of 1912, appointed to enquire into the finances and economic condition of Malta, declared the charge of one shilling to be a 'curiously low' one[131] yet nothing was done to remedy matters until 1921 when the tariff was revised in consultation with the Medical Board.[132] A wide range of medical and surgical procedures was taken into consideration varying from the performance of a hypodermic injection to lumbar puncture and the resuscitation of a new-born infant. A maximum charge of 2*s.* 6*d.* for an ordinary visit was taken as basis for the computation of other fees which were made binding only if there was no previous agreement between the practitioner and the patient. A further tariff, embodying some modifications, was published in 1938 but the charge of 2*s.* 6*d.* was still taken as the basis for the assessment of other fees.[133] A new tariff, raising the fee for an ordinary visit to five shillings, came into effect on the 15th January 1960.[134]

---

[126] Archives 464, fol. 386t, Royal Malta Library. *Del Dritto Municipale di Malta*, Malta, 1784, pp. 108 and 296.

[127] Hennen, J., *op. cit.*, p. 544.

[128] *Malta Government Gazette*, 26th August 1859, p. 305.

[129] Webster, W. B., *English Governors and Foreign Grumblers*, Malta, 1864, p. 78.

[130] Seddall, H., *op. cit.*, p. 289.

[131] *Royal Commission of 1912 . . .*, p. 172.

[132] *Malta Government Gazette*, 4th June 1921, p. 462.

CREATION OF A MEDICAL COUNCIL AND OTHER BOARDS

The Maltese Government made known its intention to introduce a National Health Service in a speech to the medical profession by the Minister of Health on the 27th November 1948;[135] however, it was only in the summer of 1955 that an attempt was made to introduce a whole-time salaried medical service when a pilot scheme for the Island of Gozo was announced by the government. The medical profession made it clear that it would welcome a National Health Service on British lines but it expected to be consulted before any measures were brought before the Maltese Parliament. A dispute thus arose between the profession and the government. The Medical Officers Union, acting for all the doctors in the Maltese Islands, boycotted the Gozo scheme. A settlement was reached on the 24th April 1956 providing for the appointment of a Medical Services Commission from the United Kingdom to undertake a comprehensive review of the medical services and submit recommendations for its better organisation. This commission, reporting in January 1957, expressed itself against the creation of a whole-time salaried service and considered that staff whose duties were mainly of a clinical nature should not be classified as civil servants. Among other things it proposed the decentralisation of the administration of the medical services and the setting up of a Medical Council, an Advisory and Executive Board and Hospital Management Committees.[136] Friction again cropped up between the profession and the government on account of the latter's delay in implementing the report of the Medical Services Commission of 1956. Agreement was finally reached on the 14th April 1958 and the creation of a Medical Council and the other boards came into being on the 16th January 1959 by Ordinance No. 1 of that year.[137] The Medical Council gives advice to the Governor concerning the granting of licences to medical practitioners and apothecaries, keeps registers in respect of such professions and maintains their ethical standards. The functions of the Advisory and Executive Board include the tendering of advice to the

---

[133] *Malta Government Gazette*, 13th December 1938, p. 1389.

[134] *Malta Government Gazette Supplement*, 15th January 1960.

[135] *The Chestpiece*, Supplement, i. 1948.

[136] *British Medical Journal* (*Supplement*), 1956, i. 19, 206, 263; 1957, i. 1961; 1958, i. 224.

[137] *Report of the Department of Emigration, Labour and Social Welfare for the year 1958*, Malta, 1960, p. 19.

Governor regarding appointments and transfers of doctors in government employment. The Hospital Management Committee prepares draft estimates of expenditure for St. Luke's Hospital and maintains its premises and equipment. It is also responsible for the proper performance of the duties of the hospital staff. The General Services Board took over part of the duties of the Medical Board.[138]

[138] *Malta Government Gazette Supplement*, 16th January 1959.

CHAPTER 48

The Teaching and Practice of Pharmacy

THE TEACHING OF PHARMACY

It is probable that a School of Pharmacy was established at the Holy Infirmary in 1676 when the School of Anatomy and Surgery was founded. It is certain that Dr. Giuseppe Zammit, the director of the School of Anatomy and Surgery, was also the teacher of botany and that in 1690 he set up, at his own expense, a botanical garden to promote the study of this subject. The garden was originally situated in the vicinity of the Infirmary in the ditch of the near-by Fort St. Elmo which was ceded for this purpose by Grandmaster Gregorio Caraffa. It contained an indigenous and an exotic collection of medicinal plants and thus provided living specimens for the practical teaching of pharmaceutical botany.[1] Dr. Zammit also introduced the study of chemistry in the school and gave practical demonstrations in this subject. Among the various chemical and pharmaceutical compounds which he used to prepare in the presence of his students was sodium sulphate, which was still known in Malta as Zammit's Salt up to 1886.[2]

Disciplinary rules for the students of the school were laid down by a chirograph of the 17th December 1729. Before being admitted to the course of studies in pharmacy, candidates ('*perseveranti*') had to be approved by the Master Apothecary of the Holy Infirmary as regards their educational attainments. They had to be able to understand Latin and also to read and write it.[3] Attendance at the lectures in the Theory of Pharmacy was compulsory and none of the students was allowed to quit the precincts of the pharmacy without the teacher's permission. Students who failed to carry out the duties assigned to them were reported to the Infirmarian for the necessary disciplinary action. Punitive measures for the first two lapses were left to the discretion of this hospital official but punishment for the third offence was awarded by no less a person than the Grandmaster himself. It consisted in the student's dismissal from the school 'without any hope of future reinstatement'.[4]

---

[1] *Storia della Società Medica d'Incoraggiamento di Malta*, Malta, 1845, p. v.

[2] Gulia, G., *Cenni storici dell'istruzione superiore principalmente della scuola medica nei tempi dell'Ordine*, Malta, 1886, p. 7.

[3] Manuscript 429, Bandi 1722–36, fol. 292t, Royal Malta Library.

After undergoing the course of studies and submitting to an examination, successful candidates were granted a Diploma in Pharmacy by the Medical College.[5] In the first two decades of the nineteenth century students were examined by the Protomedicus who also issued the relative diploma and licence.[6] In accordance with Government Notice of the 18th June 1814 certificates of proficiency in the art of pharmacy were to be issued by the Protomedicus but on the 24th March 1821 this duty devolved on the newly constituted Medical Committee, the forerunner of the Medical Board.[7]

In 1838 the statute of the university established the conditions according to which the study of pharmacy was to be conducted. Before admission to the course, students had to conform to the same educational standards required for candidates intending to follow the Course of Medicine and Surgery, i.e. the Diploma of Master of Philosophy and Arts of the University or an equivalent certificate showing that they had studied, among other subjects, physics and mathematics. The course lasted two years, the first year comprising natural history, botany and general chemistry; and the second year being taken up with practical medicinal botany, pharmaceutical chemistry and materia medica.[8] Students were given facilities to attend the pharmacy and laboratory of the Civil Hospital for practical work but they were free to acquire the same training in private establishments.[9]

No changes were effected in the programme of studies until the promulgation of the statute of 1887 when students had to do practical pharmacy during the second year at the Dispensary of the Central Hospital or at another pharmacy approved by the Special Council of the Faculty of Medicine.[10] In 1889 practical pharmacy was extended over the two years of the course and the students were debarred from sitting for their final examinations unless they produced a satisfactory certificate attesting their regular attendance at such practice.[11] By 1921 both theoretical and practical instruction was extended over a period of three years,

[4] Archives 533, fol. 180, Royal Malta Library.

[5] Mifsud, A., 'Appunti sugli archivi di Malta', *Archivum Melitense*, ii. 53.

[6] Diploma granted in 1817 to Paul Stivala.

[7] *Malta Government Gazette*, 28th April 1821, p. 2564.

[8] *Fundamental Statute of the University of Malta*, Malta, 1838, p. 46. *Fundamental Statute of the University of Malta*, Malta, 1871, p. 39.

[9] Resolutions of the Permanent Committee from 3rd March 1831 to 23rd June 1834, fol. 175; from 7th July 1834 to 9th August 1836, fol. 70, Medical & Health Archives, Valletta.

[10] *Statute of University of Malta*, Malta, 1887, pp. 25–29.

[11] *Statute of the University and the Lyceum of Malta*, 1898, pp. 23 and 36. *Statute of the University and the Lyceum of Malta*, Malta, 1907, pp. 19–20.

the successful candidates being awarded the Diploma of Pharmacist at the end of the course.[12]

The statute of 1943 brought about important modifications in the curriculum of studies. More time was devoted to the theoretical aspects of pharmacy but the period of practical training was reduced to one year. This was offset in part by a new provision requiring the students to work at the pharmacy laboratory of the University for an aggregate period of at least one hundred and twenty hours to the satisfaction of the Professor of Materia Medica.[13] No further alterations took place until 1948 when the Diploma of Pharmacist was abolished and substituted by the degree of Bachelor of Pharmacy (B.Pharm.). The course leading to the new degree was reformed and extended to four years. The period of practice at an approved pharmacy was again lengthened to two years while attendance at the pharmacy laboratory was increased to not less than two hundred and forty hours.[14] These reforms have had the effect of bringing the study of pharmacy in Malta into line with the progress achieved abroad in the education of the pharmaceutical profession. In thus striving to keep abreast with the advances registered in other countries, the University of Malta has not only raised the technical standards of the pharmacist but has also enhanced his prestige as a professional man.

PHARMACY REGULATIONS

From early times the art of pharmacy in Malta formed a separate branch of medical practice. The earliest known apothecary was a certain 'Magister Salvatus' who was in the employment of the Municipality of Mdina in 1450.[15] The apothecary must have been subject to government control at least as early as 1224 when the art of pharmacy came under State regulation through the laws of Frederick II, King of Sicily, to whom Malta then belonged. As in the case of the medical profession it is presumed that, with the cession of the Island to the Order of St. John in 1530, the Knights applied their laws, evolved during their stay in Rhodes with regard to the regulation of the pharmaceutical profession, to Malta. According to these laws a person wishing to practise as an apothecary had first to submit to an examination in the presence of the judicial authorities, of the Infirmary Physicians and of the apothecaries of the Island.[16] Before his examination he had to undergo six months training at the pharmacy of the Holy Infirmary and to obtain a certificate of proficiency from the Master Apothecary.[17]

---

[12] *Statute of the University of Malta and Regulations*, Malta, 1921. *Università di Malta, Calendario 1931–32*, pp. 226, 239 and 241. *Malta Government Gazette Supplement*, 6th *March* 1935, p. 181.

[13] *Statute and Regulations of the Royal University of Malta*, Malta, 1943, pp. 27–28.

[14] *Statute of the Royal University of Malta*, Malta, 1948, pp. 53–65. *Calendar for the Academic Year 1956–57*, Malta, 1956, p. 130.

[15] Valentini, R., 'Organizzazione municipale e classi sociali in Malta alla fine del secolo XIV', *Archivio Storico di Malta*, 1936, viii. 149.

[16] Manuscript 153, fol. 73t, Royal Malta Library.

Applications for a licence to set up in business and open a pharmacy had to be addressed to the Grandmaster, who only gave his assent after obtaining the advice of the Protomedicus. The same procedure was followed in selling or buying an already established pharmacy or in transferring it from one district to another.[18] In order to be able to serve the public at all times of the day and night, apothecaries were exempted from military duties which were compulsory for other citizens. All imported drugs were inspected by the Protomedicus at the Custom House before they were permitted to be withdrawn by their owners.[19] Another check was made by the apothecary receiving them who was enjoined by law to ensure the good quality and freshness of his ingredients. He was not allowed to sell medicines without a doctor's prescription and had to keep poisonous substances under lock and key.[20] A strict control over the sale of pharmaceutical preparations was enforced by the decree of Grandmaster Antonio de Paule of the 2nd August 1624. This decree prohibited the sale of 'aromatic substances' and medicines by anyone who had not previously obtained the licence of the Protomedicus. Opium preparations could only be sold with the written permission of the same official while such poisons as arsenic, sublimate and mercury were to be kept locked so that 'they could not be eaten by young shop assistants'. A breach of this regulation rendered the apothecary liable to a fine or to condemnation to the galleys as an oarsman with a chain tied to his feet for a period of two years. Stock mixtures and medicines were to be marked on the lid of their containers with the date on which they were compounded.[21] The laws of 1640 promulgated by Grandmaster Jean Paul Lascaris permitted trading in drugs and medicaments only after due information had been given to the Chief Pharmacist of the Holy Infirmary. The selling price of the various remedies was fixed by the Protomedicus and overcharging by apothecaries was made a punishable offence.[22]

On the 31st January 1650 a set of regulations was published consolidating the previous rules regarding the storage of poisons. These substances had to be kept apart from other drugs not only under lock and key but also under the personal surveillance of the apothecary in such a manner that his wife and children could have no access to them. He was not to allow unlicensed assistants, such as apprentices, slaves or members of his family, to compound syrups, pills and mixtures; he was also debarred from substituting any ingredient in a prescription without the previous consent of the prescribing physician. The sale and administration of abortive medicines were made illegal and punishable by the imposition of a fine and by the award of other penalties laid down by common law. Periodically the pharmacist had to submit his shop-licence for renewal to the Protomedicus. In 1662 further restrictions were imposed in connection with the dispensing of poisonous substances which were not to be sold to servants, slaves, children and suspicious characters.[23]

---

[17] Archives 533, fol. 180, Royal Malta Library.

[18] Archives 1195, fol. 19. Archives 1196, fol. 115, Royal Malta Library.

[19] Archives 1190, fols. 12 and 292, Royal Malta Library.

[20] Manuscript 153, fol. 73t, Royal Malta Library.

[21] Manuscript 2, fol. 601, Royal Malta Library.

[22] Manuscript 148, fol. 80, Royal Malta Library.

The apothecary was not allowed to treat the sick or to exercise any profession except his own, but towards the end of the Order's domination over Malta this rule was sometimes departed from. Thus by the late eighteenth century apothecaries in rural areas were permitted to practise 'low surgery'[24] while in 1791 the apothecary of the village of Luqa was appointed, at his request, to the post of clerk of the regiment of that village.[25]

Once a year every pharmacy in the Island was inspected by the Protomedicus. Deteriorated drugs and medicaments were destroyed and the apothecary was fined for having kept them for sale. A decree of the 27th January 1638 extended this punishment also to the customers who dared to buy their requirements from an apothecary whose drugs had been found to be in a bad state.[26] At the Holy Infirmary the pharmacy was inspected every three months by the Hospitaller in the company of the 'prud'hommes', the physicians and the apothecary of the hospital. Worthless and spoilt ingredients were burnt. Neglect of these duties on the part of the Hospitaller involved loss of promotion to the higher ranks of the Order's hierarchy.[27]

Pharmacy regulations issued prior to 1724 were embodied in the code of laws promulgated by Grandmaster Antonio Manoel de Vilhena and published in that year.[28] They were confirmed in 1784 by the code of Grandmaster Em. de Rohan and by the edict of the 17th July 1797.[29] Subsequent advances in medical knowledge have affected these old legislative provisions; however, it is remarkable that, in spite of the distance of more than one hundred and fifty years, the laws regarding such administrative matters as the licensing of apothecaries, the sale of medicines, the safe keeping of poisonous substances and the periodical inspection of pharmacies have remained substantially unchanged and in 1900 formed the basic framework of Chapter IV of the Second Sanitary Ordinance regulating the practice of pharmacy in Malta.[30] It is a tribute to our pioneer legislators that their enactments are still in force to-day.

---

[23] Manuscript 152, fols. 328 and 454, Royal Malta Library.

[24] Archives 1195, fol. 69, Royal Malta Library.

[25] Manuscript 182 Università, fol. 207, Royal Malta Library.

[26] Archives 149, fols. 54–55, Royal Malta Library.

[27] Archives 309, fol. 73, Royal Malta Library.

[28] *Leggi e costituzioni prammaticali*, Malta, 1724, p. 73.

[29] *Dritto Municipale di Malta*, Malta, 1784, p. 295. *Collezione di bandi*, Malta, 1840, p. 41.

[30] *Malta Government Gazette Supplement*, 30th May and 2nd July 1901. Medical and Kindred Profession Ordinance, Chapter 51 of the Laws of Malta, 1942.

In 1900 the Chamber of Pharmacists was founded to maintain the dignity and the rights of the profession and to protect the common interests of apothecaries. In 1903 an ordinance was submitted to the Council of Government to establish the Chamber by law.[31]

INDIGENOUS 'MATERIA MEDICA'

Before the chemical synthesis of drugs was achieved in the last quarter of the nineteenth century most of the medicaments forming the armamentarium of the apothecary consisted of natural substances. The manufacture of medicinal preparations on a commercial scale had yet to begin and many of the ingredients on the pharmacy shelves were parts of plants and their products. The art of the apothecary, therefore, implied a knowledge of both the exotic and the native flora and of the preservation of the various vegetable parts that were deemed to be of medicinal value.

The earliest known work on the Maltese flora is a short study written in 1670 by Dr. G. F. Bonamico under the title of *Brevis notitia de plantis quae in Melita et Gaulo observantur.*[32] Following the establishment of the botanical garden in 1690, a list of its plants was drawn up under the title of *Elenco dell'erbe medicinali che si coltivano nel fossato del Castel St. Elmo.* (A list of the Medicinal Herbs Cultivated in the Ditch of Fort St. Elmo.)[33] During the brief French occupation of the Island provision was made for the appropriation of an area of land thirty acres in extent, in the vicinity of Valletta, for the establishment of a new botanical garden.[34] This plan never materialised but soon after the expulsion of the French from Malta the old garden was transferred from the ditch of St. Elmo to Floriana near its present site, under the administration of Sir Alexander Ball in the early years of the last century.

By far the most prized plant in the past was the *Cynomorium coccineum* alleged to have been discovered in the Island in 1600.[35] It was also known as *Fungus melitensis* or Maltese Mushroom although the plant has no more right to the appellation '*melitensis*' than it has to its designation as a mushroom. This misleading label arose from the fact that when it was first found it was believed to be a fungus and to grow only in the Maltese Islands—a belief that persisted well into the nineteenth century until it was shown that the plant grows in various parts of Europe and North Africa.[36] Even in the Maltese Islands, its habitat was thought to be restricted exclusively to a detached piece of rock situated to the north-eastern extremity of Gozo known as the General's Rock (in Maltese '*Hagra tal General*') and Fungus Rock. The plant is also called the General's Root ('*Gherq il General*' and '*Gherq is-sinjur*') because tradition has it that it was first discovered on this rock by a general of the Order's navy.[37]

---

[31] *Statuti della Camera Farmaceutica di Malta*, Malta, 1900. *Malta Government Gazette*, 22nd May 1903, p. 511.

[32] Caruana, V., *Saggio apologetico di storia*, Malta, 1900, p. 46. Manuscript 142, vol. iv, fol. 438, Royal Malta Library. Gulia, G., *Repertorio Botanico Maltese*, Malta, 1855–56.

[33] *Storia della Società Medica . . .*, p. 15.

[34] Hardman, W., *A History of Malta*, London, 1909, pp. 87 and 99.

[35] Manuscript 142, vol. iv, fol. 365, Royal Malta Library.

[36] Caruana, Gatto A., 'The "Fungus Melitensis"', *The Mediterranean Naturalist*, 1892, ii. 127.

The plant, which grows six to seven inches in height, contains mucilage and is of a bitter taste and on drying assumes a garnet colour.[38] The Maltese physician Dr. G. F. Bonamico wrote a short dissertation about it in which he described the manner of its preparation. The plant was cleaned of soil and other extraneous matter and then put in a well-stoppered earthenware vessel and the whole baked in an oven. The dried plant was then powdered in a marble mortar and passed through a sieve before being administered as a wine infusion or mixed with honey. He prescribed it in apoplexy and in dysentery.[39] Various other therapeutic virtues were ascribed to its astringent properties. Its reputation as a sure and quick-acting remedy became well established by the time of the reign of Grandmaster Jean Paul Lascaris Castellar (1635–57). It was administered in wine to patients suffering from coughing of blood and from dysentery with 'most salutary effects'.[40] Such was the reliance on the efficacy of this mixture that when the patient did not recover after taking the mixture it was considered a certain indication that he had not been given the genuine plant. The drug also came to be regarded as a specific for syphilitic diseases, so much so that many of the *demi-monde* of Malta went to Gozo to feed on the plant.[41] Among the English too it was used as an anti-venereal herb in the seventeenth century.[42]

As the fame of the plant spread beyond the Maltese Islands it began to be exported to Europe and the Grandmasters used to send it as a present to the crowned heads of the continent. It figured prominently in the medical literature of the period. In 1674 Dr. P. Boccone of Palermo described it (with an illustration) in his *Icones et descriptiones* and also in the *Museo di fisica* in an essay which he dedicated to Sir J. Hoskin, Bart., who was the president of the Royal Society of London.[43] He spoke about its medicinal virtues at great length and adduced several alleged cures in support of his assertions. Linnaeus has, likewise, described the plant in his *Amoenitates Academicae* (Vol. IV. Dissert. LXV) and considered it an excellent remedy for drying up ulcers, strengthening the gums and stopping uterine bleeding.[44] The great demand for the plant eventually led to fears of its extinction. The Grandmaster, therefore, reserved for himself the sole right to gather it[45] and legislative measures involving the penalty of rowing in the galleys for a number of years were enacted against transgressors. As, however, even this punishment proved to be insufficient as a deterrent, Grandmaster Em. Pinto caused the sides of the Rock to be smoothed in 1744 to render access to the plant extremely difficult if not impossible. As an additional precaution two men were employed in 1746 to guard the Rock. These watchmen lived in a cavern near Dwejra which became known as the Guard Cavern ('*Ghar ta l-ghassa*').[46]

---

[37] Farrugia, G., *Ghawdex bil grajja tieghu*, Malta, 1936, p. 144.

[38] De Boisgelin, L., *Ancient and Modern Malta*, London, vol. i, 1805, p. 73.

[39] Abela, G. F., and Ciantar, G., *Malta illustrata*, Malta, 1772, pp. 349–352. Manuscript 142, vol. iv, fol. 413. Manuscript 1272, no pagination, Royal Malta Library.

[40] Abela, G. F., *Della descrittione di Malta*, Malta, 1647, Lib. I, Not. X.

[41] Adams, A. L., *Notes of a Naturalist in the Nile Valley and Malta*, Edinburgh, 1870, p. 122.

[42] Abela, G. F., and Ciantar, G., *op. cit.*, pp. 349–352.

[43] Boccone, P., *Icones et descriptiones*, Palermo, 1674, p. 80. Boccone, P., *Museo di fisica*, Venice, 1697, p. 69.

[44] De Boisgelin, L., *op. cit.*, p. 73.

In March 1800 a proclamation was issued by Sir Alexander Ball, the provisional Head of the Maltese Government, prohibiting the collection of the 'mushroom' without the permission of his Excellency or his Secretary.[47] As late as 1842 the Rock was still being visited for the plant. Access to it was by means of a primitive piece of machinery. Mr. George French Angas has thus recorded his landing on the Rock at this period: 'Our picturesque group halted at the extremity of the point between which and the General's Rock ran an arm of the sea which we had to cross in a small box moved along by a rope and pulleys. When the machinery was adjusted, one man crossed the chasm first which was 150 feet wide. On the return of the box I got in and, holding firmly by the rope, I soon reached the opposite side also. The journey over this arm of sea was any thing but pleasant as it consisted of a series of jerks and the landing on the rock was very steep and dangerous . . . The summit of the rock is covered with bushes, wild stocks and golden rod. After wandering about and searching for a fungus, which I succeeded in finding, I returned in the same manner . . . Some time since the cables of this novel aerial conveyance gave way and precipitated the passenger into the gulf below.'[48] Scientific pharmacognosy has robbed the 'fungus' of all its romance and fabulous virtues so that the plant is now almost forgotten and relegated to the realm of botanical curiosities.

Extensive use was made of less renowned but more common native plants such as *Colchicum autumnale* (Meadow Saffron), which was administered in rheumatic affections; *Scilla maritima* (Squill), prescribed by the physicians of the Holy Infirmary for its diuretic effects; *Aloe vulgaris*, which was given as a purgative;[49] and the milky juice from the branches of the domestic fig-tree (*Ficus sativa*) for the removal of warts and other skin excrescences. Dried figs were recommended as 'pectorals' and 'emollients' but the immature fruit was to be avoided as it was believed that it produced fever and dysentery.[50] *Pimpinella anisum* (Anise) and

---

[45] De Boisgelin, L., *op. cit.*, p. 72.

[46] Ferres, A., *Memorie dell'Inclito Ordine Gerosolimitano*, Malta, 1881, p. 413.

[47] *Collezione di bandi*, Malta, 1840, p. 53.

[48] Angas, G. F., *A Ramble in Malta and Sicily*, London, 1842, p. 55.

[49] *Storia della Società Medica . . .*, pp. 29, 33 and 34.

[50] De Boisgelin, L., *op. cit.*, pp. 139 and 147.

Cuminium cyminum (Common Cumin) were widely cultivated but by the early decades of the last century they fell into disfavour as, though profitable for the farmer, the growing of aromatic seeds was considered injurious to the soil.[51]

In 1845 Dr. Vincenzo Dionisio Portelli, at a meeting of the Società Medica, read a serial paper on the local medical flora in which he enumerated and described a large number of native medicinal plants and indicated their therapeutic uses. They comprised anthelmintics, diuretics, febrifuges, vesicants, purgatives, expectorants, astringents, narcotics, emetics, etc.—quite a representative range of remedies that the pharmacist of the time was expected to stock.[52] Dr. G. G. Aquilina, Professor of Chemistry at the University, directed his attention, in 1848, to an investigation of the nutritive values of various wild plants growing in the Maltese Islands, such as the Algae, Graminaceae, Liliaceae and Leguminosae. He was prompted to publish a brief account on this subject by the famine that had, a short time previously, ravaged Ireland and some provinces of France and which also had unfavourable repercussions on Maltese economy, the privations being felt especially among the poor of Gozo.[53]

One can form an idea of the nature and number of the mineral and animal substances that were to be found in the pharmacies of the olden days from the price-list of the 'simples' and 'compounds' that were available at the pharmacy of Santo Spirito Hospital at Rabat in the eighteenth century. The list was compiled by the apothecary of the Holy Infirmary, Lorenzo Farigiani, and published in 1769 under the title of *Taxa recens pretii omnium pharmacorum*. It contains over seven hundred and eighty medicinal substances. Their prices vary from one 'grain' (one twelfth of a penny) to thirty 'scudi' (£2 10*s*.) an ounce. Among the cheapest preparations were sulphur, '*aceti rosati*', '*saccari rubri*' and '*aquae rosarium*'; the most costly medicaments included '*ambrae grysae*', '*florum benzoini*', '*magister cornu cervi*' and distilled oil of cinnamon. The bezoar stone—a concretion found in the stomach of the goat and other animals—was also a much prized remedy for various ills. A box containing 'a large bezoar stone with three other smaller ones' was donated by the Grandmaster, as a sign of esteem, to a Prelate in the early eighteenth century.[54] Many items listed by Farigiani are still familiar to the modern pharmacist such as antimony, arsenic, balsam of tolu, camphor and opium. Quite a number of other ingredients, however, will be looked for in vain in a twentieth-century pharmacopoeia such as '*adipis viperae*', '*cornu cervicis rasurae*' (shavings of stag horn), '*dentis opri rasurae*' (shavings of boar's teeth), '*eburis rasurae*' (ivory shavings), '*sanguinis hyrcius*' (caprine blood), '*cranii hominis*' (precipitate of human skull) and 'St. Paul's Tongue'.

---

[51] Davy, J., *Notes and Observations on the Ionian Islands and Malta*, London, 1842, vol. i, p. 399.

[52] *Storia della Società Medica . . .*, p. 14.

[53] Aquilina, G. G., *Di alcune piante maltese dette volgarmente selvatiche che possono servire di nutrimento all'uomo*, Malta, 1848.

[54] Miscellanea 210, Extract 3, Royal Malta Library.

The healing properties of 'St. Paul's Tongue' were as highly appreciated as those of the 'fungus' already considered and its story is no less interesting. The Maltese archipelago was formed under the sea and, as a result, a rich deposit of fossils of many kinds of sea animals are to be found embedded in the rocks. Among these fossil remains there are numerous fish-teeth belonging to the shark (*Carcharodon megalodon*). They are of a flat triangular shape with either a smooth or serrated margin. They are covered with grey enamel and vary from one inch to seven inches in length. In the past they were termed 'glossopetra' from their resemblance to a tongue.[55] Their association with St. Paul is connected with his shipwreck on the Island of Malta in A.D. 60 and with the popular tradition that they are the replicas of the Saint's tongue which, during his fervant preaching to the Islanders, penetrated the solid rock.

The 'tongue' was pounded into a fine powder and applied to wounds which it was alleged to heal in a miraculous manner. Country-folk used to carry one of these teeth about with them, sometimes mounted in silver or hung round their necks, as an amulet against the bites of venomous serpents.[56] While warming himself by a fire, St. Paul was attacked by a venomous viper which fastened itself to his hand but he shook it off and contrary to the anticipation of the inhabitants he escaped unhurt. Hence the ancient usage of 'St. Paul's Tongue' against the bites of snakes and other poisonous creatures. Tradition extended this antidotal power to 'all born in Malta upon the day of the conversion of St. Paul (who) cure the bites of serpents and all poisons whatever; and by their saliva take away all inflammations'.[57]

Similar therapeutic virtues were attributed to the so-called Maltese earth or stone. This earth, consisting of a soft magnesium limestone, was dug out of a cave at Rabat, near Mdina, where St. Paul is reputed to have lived during his three months stay in the Island; hence its other names of 'Grace of St. Paul' and 'St. Paul's Earth'. Its fame had already spread to Italy in the sixteenth century where medical men were recommending its use, both externally and internally, against the bites of scorpions.[58] According to popular belief the supply of this stone from the cave was inexhaustible because, through the Saint's intervention, it was continuously regenerated so that although sufficient quantities were taken away to load several ships, the dimensions of the cave remained precisely as before.[59]

Medals, drinking vessels, vases and pastilles were made out of the

---

[55] De Boisgelin, L., *op. cit.*, p. 133.

[56] Busuttil, V., *Holiday Customs in Malta*, Malta, 1922, p. 133.

[57] Bryant, J., *Observations and Inquiries . . . Containing Dissertations . . . on the Island Melite*, Cambridge, 1767, p. 68.

[58] Ingrassia, G. F., *Informatione del pestifero et contagioso morbo il quale affligge et have afflitto Palermo*, Palermo, 1577, p. 39.

[59] Badger, G. P., *Historical Guide to Malta and Gozo*, Malta, 1879, p. 260.

'stone' and 'earth' and impressed—since at least 1655—with a special seal from which they became known as '*terra sigillata Melitae*' (Sealed Earth of Malta). No fewer than seventeen varieties of these seals have been described. The pastilles were of a round shape and of different weights and dimensions. One variety bore an imprint of the Maltese Cross on one side and of the figure of St. Paul on the other; other specimens, weighing one ounce and having a diameter of sixty millimetres, had the image of St. John the Baptist kneeling in front of the Lamb of God or of a hermit praying in front of the Crucifix with a three-masted ship on the obverse. Elliptical and rectangular pastilles were also produced and impressed with various designs and figures such as the initials 'S P' (St. Paul), the letters 'I H S' (the monogram of Christ), serpents, scorpions and spiders, images of St. Joseph, the Blessed Virgin and St. Peter, and the heraldic arms of the Grandmasters.[60]

Apart from its use as an antidote against poisons, the 'earth' was greatly esteemed as a febrifuge, an astringent, a sudorific and a cordial.[61] It is interesting to note that its medical use persisted well into the eighteenth century so that mention of the '*terre de Malte*' and of the '*langue de serpent*' is to be found in continental literature dealing with the 'materia medica' of the period.[62] P. Brydone, F.R.S., who visited the cave in 1770, wrote about the 'earth': 'There is not a house in the Island that is not provided with it, and they tell us there are many boxes of it sent annually not only to Sicily and Italy but likewise to the Levant and the East Indies . . . We did not fail to stuff our pockets with this wonderful stone . . . It tastes like exceeding bad Magnesia and I believe has pretty much the same effects. They give about a teaspoonful of it to children in the smallpox and in fevers. It produces a copious sweat about an hour after and, they say, never fails to be of service.'[63]

Another remedy belonging to the class of the 'tongue' and the 'earth' was the so-called 'odontopetra' which are actually the fossil vertebrae of various kinds of fish. They are hemispherical in shape and have concentric circles of various colours with a central dot resembling the pupil of an eye. From their configuration they are popularly known as 'serpent's eyes' ('*Bufonitae*') and were supposed to possess the same therapeutic values as the 'tongue' and 'earth'.[64] They were held in such high repute by all social classes in Malta that a number of 'serpent's eyes' and 'tongues of St. Paul' worked in gold filigree were presented as a gift by the Grandmaster to a dignitary of the Church in the early eighteenth century.[65] One of the Grandmasters, who lived in the following century, is said to have worn one of these 'eyes' in a ring to protect him from colic, while even Henry V of England possessed a number of 'serpent's eyes' garnished in gold.[66] Leaflets extolling their therapeutic virtues were printed in French and Italian from the seventeenth century onwards.[67] One of these hand-bills published in Messina in the eighteenth century gives the following instructions for the use of these remedies: 'The serpent's eyes are worn in small rings like precious stones in such a way as to touch the skin; the tongues are hung round the neck or arm; or one may drink water, wine or other liquors containing a little of the earth; or an infusion of the said eyes and tongues; or water or wine which has been held in a vase made of St. Paul's stone. Above everything one must be warned that the stone and other products must be genuine and brought from the Island of Malta by a person of trust and with due testimonials.'[68]

---

[60] Stilon, A., 'Alcuni nostri amuleti', *Archivum Melitense*, vii. 103.

[61] Abela, G. F., and Ciantar, G., *op. cit.*, p. 349.

[62] Geoffroy, M., *Traité de la Matière Médicale*, Paris, 1757, pp. 115 and 141.

[63] Brydone, P., *A Tour through Sicily and Malta*, London, 1776, vol. i, p. 355.

[64] De Boisgelin, L., *op. cit.*, p. 133.

[65] Miscellanea 210, Extract 3, Royal Malta Library.

THE FIRST PHARMACOPOEIAS

Private apothecaries were using the pharmacopoeia of Brugnatelli by 1821 while government hospitals followed the Edinburgh one at the same period.[69] In England weights and measures were standardised by the Imperial Weights and Measures Act of 1828; they were first introduced for medicines at the pharmacy of the Malta Civil Hospital on the 1st April 1834 when the apothecary was instructed to issue medicines in conformity with these weights and measures and the hospital staff directed to write their prescriptions accordingly. The London Pharmacopoeia was to serve as a guide.[70] Private practitioners remained free to prescribe in accordance with a pharmacopoeia of their choice and in fact English, French and Italian ones were used. Prescriptions were written in Latin, English or Italian while there were some doctors who did not furnish the patient with a written prescription but preferred to order the medicine verbally from a pharmacist of their choice and to have it sent to the patient. In 1841 an appeal for the establishment of an official pharmacopoeia and for the regulation of drug dispensing was made by Dr. Tommaso Chetcuti[71] but it was not until 1854 that apothecaries were obliged by law to adhere in their preparations to the London Pharmacopoeia.[72] When this publication was superseded by the British Pharmacopoeia in 1864, the latter was adopted as the official pharmacopoeia in the Island.[73]

[66] Thompson, C. J. S., 'A Mediaeval Poison Cup made from the Terra Sigillata of Malta', *British Medical Journal*, 1932, i. 73.

[67] Miscellanea 547, Extract 2, Royal Malta Library.

[68] Stilon, A., *op. cit.*, p. 96. Manuscript 142, vol. v, fol. 268, Royal Malta Library.

[69] Hennen, J., *Sketches of the Medical Topography of the Mediterranean*, London, 1830, p. 544.

[70] Resolutions of the Permanent Committee of 3rd March 1831 to 23rd June 1834, fols. 154 and 171, Medical & Health Archives, Valletta.

[71] Chetcuti, T., 'Discorso inaugurale recitato il 1mo dicembre 1841', *Il Filologo*, 9th December 1841, p. 52.

[72] *Leggi di polizia*, Malta, 1872, p. 41.

[73] *The British Pharmacopœia*, London, 1899, p. viii. *Police Laws*, Malta, 1883, p. 41.

SOME EARLY PHARMACIES

From the petitions which were submitted to the Grandmasters and which are still preserved in the archives of the Order of St. John in Malta, we can form an idea of the distribution of pharmacies in the Maltese Islands in the eighteenth century. In November 1772 there were thirty apothecaries in Malta (including those employed at the Holy Infirmary) and two in Gozo,[74] so that there could not have been more than thirty-two pharmacy shops in the two islands at this period. Two were in Senglea, the same number in Bormla or Kospikwa and one at Birgu or Vittoriosa in 1781. None existed at this time in the villages of Tarxien, Zabbar, Gudja and Zejtun so that the inhabitants of these places had to travel to Kospikwa to obtain their medicaments until a pharmacy was established at Zejtun by 1791.[75] Other villages had each its own pharmacy such as Zurrieq (1760), Zebbug (1761), Qormi and Mosta (1771),[76] Luqa, Birkirkara, Naxxar, Lija, Mdina (1772) and Rabat (1777).[77] In 1782 Valletta had six pharmacies. Floriana, its suburb, had one by 1764 but it closed in subsequent years and the people of this place had to go to Valletta to get their drugs until another pharmacy was opened at Floriana in 1797.[78] The inhabitants of Gozo were served by the pharmacy of St. John the Baptist Hospital and by a privately owned one set up at Rabat in the vicinity of the same hospital in 1772.[79]

Very often these pharmacies passed from father to son or from the owner to his assistant.[80] None of these eighteenth-century shops has survived but some of the equipment of the pharmacy of Santo Spirito Hospital at Rabat (Malta) is still extant such as the water fountain and a number of unique blue pharmacy jars.

The apothecary of two hundred years ago was not only a dispenser of prescriptions but also a manufacturer of medicinal preparations. For this purpose every apothecary had a laboratory at the back of his pharmacy where he macerated and 'digested' roots, herbs, seeds and even pieces of human skulls in spirit of wine for days on end. There he also decanted liquids and prepared infusions, decoctions and tinctures. His implements included strainers, funnels and crucibles and also mortars and pestles of different kinds and sizes for grinding ingredients and mixing ointments. He had stills for distilling aromatic waters and earthenware vessels and glass retorts for heating and boiling liquids. There were also large globular carboys of glass, encased in basket-work to facilitate their handling, for the storage of acids. This laboratory work was not without hazards. In his application for a pension in 1769, the apothecary of the Holy Infirmary stated that during thirty-two years service in the hospital pharmacy he nearly lost his life on two separate occasions on account of explosions while preparing silver nitrate and nitric acid. He had remained permanently disabled with a deformed chest, loss of hearing in one ear and a crippled leg.[81]

---

[74] Manuscript 429, Bandi 1765–72, fol. 115, Royal Malta Library.

[75] Archives 1194, fol. 7, and Archives 1197, fol. 89, Royal Malta Library.

[76] Archives 1192, fol. 49, and Archives 1196, fol. 115, Royal Malta Library.

[77] Archives 1190, fol. 80; Archives 1196, fol. 115; Archives 1193, fol. 135; Manuscript 181, fol. 380, and Manuscript 429, Bandi 1765–72, fols. 115–117, Royal Malta Library.

[78] Archives 1194, fol. 45; Archives 1190, fol. 274, and Archives 1198, fol. 114, Royal Malta Library.

[79] Archives 1192, fol. 39, Royal Malta Library.

[80] Archives 1194, fol. 7; Archives 1195, fol. 77, and Archives 1196, fol. 23, Royal Malta Library.

THE PHARMACY JARS

Specimens of the ceramic drug containers that were in use in the late sixteenth and subsequent centuries are on display at the National Museum, Valletta. This representative collection has been gathered from various sources such as Santo Spirito Hospital, the Holy Infirmary, the Central Hospital, St. Vincent de Paul Hospital and the Gozo Hospital.[82] Others are in the possession of private collectors of antiques.

The jars of the Holy Infirmary remained in use when it was turned into the General Military Hospital at the dawn of the last century, until they were transferred to the Governor's Palace at Valletta by order of Sir John Gaspard Le Marchant (1858–64) in the mid-century. Two hundred and thirty-nine jars and bowls, some of them with the labels of the drugs still attached to them, were deposited in the Palace Armoury in 1888. These majolica vases have been attributed to Urbino, Venice, Caffaggiolo and Caltagirone in Sicily. A large sized jar of a deep blue colour with the word '*mostarda*' (mustard) and the figure of a shepherd was in the State Drawing Room of the Palace in the same year. It was described as being sixteenth-century Urbino ware and valued at £300. In the Dining Room were two other majolica jars, with the figures of a bishop and a monk, and a number of large vases in the shape of owls with the heads of the birds forming the lids. Two other jars, one of them with the original parchment label bearing the words '*Ferri suphat*' still sticking to it, were to be seen seventy years ago in the Great Hall of Verdala Palace, the summer residence of the Governor of Malta.[83]

The jars are of various shapes and dimensions. There are the so-called '*albarelli*' which are graceful, tall, cylindrical vessels with concave sides in their middle or waist; large globular vases with a narrow mouth; voluminous pitchers with an ear on each side of the wide neck; syrup jars with curved spout and handle; small cylindrical ointment pots; and bottles with a bulging bottom topped by a long narrow neck.

With regard to colouring and design they may be divided into two groups, the monochrome and the polychrome ware. The former has a uniformly bluish background with decorations in the same colour but of a darker hue. Some of these jars are of seventeenth-century manufacture and display the armorial crest of Grandmaster Gregorio Caraffa (1680–90).[84] Others are of a later workmanship and bear the coat-of-arms of Grandmaster Ant. Manoel de Vilhena (1722–36) and are possibly the work of Venetian potters. In fact they resemble closely the jars in the collection at the pharmacy of Palazzo Rezzonico at Venice.[85] The polychrome jars are probably of Central Italian and Sicilian manufacture though their forms and designs are imitative of Venetian ceramics. They have been dated as late sixteenth or early seventeenth century. Indeed quite a number of them are decorated with the crest of Grandmaster Alofius de Wignacourt (1601–22). Others are undoubtedly of eighteenth-century make as is attested by the date (1729) and by the armorial bearings of Grandmaster Ramon Perellos y Roccafull (1697–1720). Their glazed surface is richly ornamented in vivid yellow, blue, green and orange with foliage, tendrils, fruits and flowers. The main decorative feature of the larger ones is the figure of the serpent coiled round the trunk of the palm tree or a medallion with representations of saints, angels or human heads and surrounded by scrolls of a baroque design. The jars are unlabelled, except occasionally, and none has a lid, their mouth having been covered, when in use, by parchment caps.

---

[81] Archives 660, fol. 6, Royal Malta Library.

[82] *Annual Reports for the Museum for 1907–08*, p. 3; *for 1908–09*, p. 2; *for 1931–32*, p. 2.

[83] Lintorn Simmons, B., *Description of the Governor's Palaces in Malta*, Malta, 1887, pp. 37, 43, 44, 59 and 72. Lintorn Simmons, B., *Appendix to the Description of the Governor's Palaces*, Malta, September 1888, p. 117.

These fascinating jars began to go out of use—at least in government hospitals—by the mid-nineteenth century. In fact in August 1850 'a complete set' of stone coloured jars with black labels and of white glass bottles of uniform shapes were ordered by the Inspector of Charitable Institutions for the dispensary of the Central Hospital.[86]

THE NINETEENTH CENTURY PHARMACY

The privately owned pharmacy of Gozo, set up in 1772, was no longer in existence by 1850[87] but in Malta there were twenty-eight pharmacies in Valletta and the three cities of Senglea, Bormla and Birgu in that year. They were known by the name of the apothecary or doctor who owned the pharmacy but a few of them bore such shop signs as the English Dispensary at 44, Strada Teatro, Valletta; the Original English Dispensary, established in 1816 opposite St. John's Cathedral at Valletta; and the British Dispensary at 245, Strada Reale, Valletta.[88]

By the mid-century the apothecary had started to expand his business beyond the strict limits of his profession; thus besides pharmaceutical preparations and such appliances as trusses and elastic stockings he was also advertising patent medicines, insecticides, continental and English perfumery, toilet soap, hair dyes and even marking-ink, grease-spots removers and photographic chemicals.[89]

---

[84] In the possession of Chev. Jos. Galea, Mdina.

[85] Dr. J. Cauchi, LL.D., Curator of Fine Arts, National Museum, Valletta, personal communication, 13th May 1959.

[86] Hospitals from 12th January 1849 to 31st December 1850, fol. 47, Medical & Health Archives, Valletta.

[87] Dispensaries from 18th January 1849 to 29th October 1850, fol. 52, Medical & Health Archives, Valletta.

[88] *Almanacco di Malta per l'anno del Signore 1850*, Malta, p. 70. *Almanacco di Malta per l'anno 1863*, Malta, p. 14. *Muir's Almanack for 1845*, Malta, no pagination. *Muir's Almanack for 1861*, Malta, no pagination. *Grande almanacco di Malta pel 1854*, Malta, pp. 65–66.

Several of these Victorian establishments survived into the first quarter of the present century and still retained unchanged the charm of their antique setting. Over the door hung a green cross. In their distinctive interior the most conspicuous feature was the massive mahogany counter, marble topped, which occupied the back part of the pharmacy. It stretched from side to side across the room except for a narrow passage at one end through which the apothecary could pass from the shop proper into the dispensing space behind the counter. His implements and utensils were hidden from view by a high wooden screen that ran along the front edge of the counter so that the customer could only hear the clink of the glass measures or the pounding of the pestle in the mortar; but a discreet peep round the side of the counter revealed, among other things, the scales and tiny weights, the chalice-like wooden pill burnisher and the slab of marble on which the ointments were mixed.

Those ancient emblems of pharmacy—the serpent coiled round the abacus and the pestle and mortar—were painted on a mirror or glass panel which formed the centre piece of the screen on the counter; or else they were carved in wood at the top of the row of shelves that covered the wall behind the dispensing counter. Two large pear-shaped carboys of glass, filled with coloured liquids, one red and the other green, topped the two ends of the screen.

A wooden framework lined the walls of the shop dividing them into long vertical compartments which held rows of shelves on which were arrayed numerous porcelain drug jars of a cylindrical shape capped by graceful knobbed lids. There were white, pink, blue and green ones. They were sometimes decorated with bands of gold or of coloured leaves or garlands and festoons of dainty flowers or with palm trees and serpents. Each had a gilt label displaying in dark lettering the name of the preparation inside it. The lower part of the wooden framework was occupied by a number of drawers for the storage of leaves, seeds and roots each with a label indicating its contents.

Up to thirty years ago the pharmacies of the Maltese Islands were not merely places of business but also the rendezvous of small circles of cultured and professional people who gathered there in the evening, so that it was a common sight to see the apothecary, the doctor, the lawyer, the notary and the priest engaged in a dignified discussion of the topics of the day. The quick tempo of present-day living has disbanded this coterie of men while current fashions in shop design and the spate of packed proprietary goods have swept away the individuality and dignity of the old-time pharmacy, which has now degenerated into a mere shop.

---

[89] *The Malta Times*, 28th May 1863, p. 4. *Il Mediterraneo*, 6th April 1853, p. 12; 20th April 1853, p. 12.

CHAPTER 49

Dentistry

THE first attempts to give dentistry a scientific basis in Malta date back to the beginning of the present century.[1] Before that time the extraction of teeth and the treatment of dental ailments were carried out by surgeons, physicians, apothecaries, barber-surgeons and barbers. In 1636 a Dr. Joseph Cossaeus, 'Melitensis Artium Magister et Licentiatus Medicinae', was sufficiently interested in dental surgery to choose the subject of the surgical treatment of dental pain for one of his graduation theses at the University of Montpellier.[2]

Concern with dental hygiene and the preservation of teeth was evident in Malta, at least among the higher classes, by the first decades of the eighteenth century. The teeth were scrubbed with a piece of cloth to which was applied a powder consisting of burnt bread, pulverised pumice stone, carbonised rosemary and other ingredients. Other preparations were in use for 'strengthening the gums' and 'whitening the teeth'. Powdered stag's horn was recommended for fixing loose teeth.[3] In December 1733 Gio. Batta Grimaldi Francolino, who left Malta in his early years, returned as a dentist to the Island to practise his art.[4] In 1760 the Venetian surgeon Pietro Siveri came to Malta and published a leaflet at the Government Printing Press notifying the public that he was prepared to extract teeth at his residence. Another hand-bill was printed at the same press to advertise a 'Cephalic Tincture' prepared by the Italian Royal Dentist Giovanni Ornieri who claimed that his tincture, when instilled in the nose, cured deafness, cataract and toothache.[5] A dentist from Bologna, Mauro Gurrini by name, applied for, and was granted, the licence 'to exercise and advertise his art' in Malta in June 1772. In his application he claimed to be able to treat all the diseases of the mouth, to clean and extract teeth and fix artificial ones.[6] A dentist appears on the pay-list of the Holy Infirmary in 1777 but it is probable that the post was established at an earlier date.[7] By 1779 the Grandmaster had his personal dentist—a certain Pasquale Almirante—who was also a 'botanist' and the 'impresario' of the Manoel Theatre.[8] Towards the end of the century we come across a Neopolitan, Gregorio Magrin, who was a galley slave in Malta but who had worked also as a barber and dentist. His condemnation to the galleys, however, had prevented him from devoting himself entirely to his dental pursuits for which, 'thanks to his proficiency, he was much in demand'. He, therefore, petitioned the Grandmaster in December 1795 to free him from the galleys to enable him to earn his living by the exercise of his art. He promised to continue to reside in Malta and his request was granted.[9]

---

[1] *Statute of the University and Lyceum of Malta*, Malta, 1907, p. 41.

[2] Cossaeus, J., *Suprema Apollinaris Laurea seu Doctoratus Quaestiones Quatuor Cardinales*, Monspelii, 1636.

[3] Manuscript 252, fols. 108–110, Royal Malta Library.

[4] Manuscript 20, fol. 35, Royal Malta Library.

[5] Miscellanea 246, no pagination, Royal Malta Library. *Le rare qualità della tintura cefalica distribuita da me Giovanni Ornieri Dentista Reale*, Malta, 1765, National Museum, Valletta.

[6] Archives 1192, fol. 69, Royal Malta Library.

[7] Archives 1715, Carta 4t, Royal Malta Library.

By the thirties of the nineteenth century a number of British and Italian dentists were practising in the Island,[10] among whom was a Licentiate of the Royal College of Surgeons of Edinburgh.[11] In an advertisement of 1845 one of them claimed to fix artificial teeth 'from one to an entire set which, as arranged and fixed by him, perform all the operations of natural teeth while they cannot be recognised as the production of art even by the most practised eye'. He also plugged teeth with gold leaf and sold a specific for fastening loose teeth and 'fortifying' the gums. He was quite a versatile man for, apart from being a skilled jeweller he was also a 'chiropodist' and undertook to treat corns, bunions, defective nails, etc. Honestly enough he asked no remuneration until his work had been brought to a successful conclusion.[12] Another dentist advertised teeth filling 'without pain, heat or pressure' and the extraction of caries under aether anaesthesia in 1847.[13] The first Maltese surgeon-dentist to set up practice seems to have been Alexander Preziosi of 69, Merchant Street, Valletta. He was a pioneer in the use of 'vulcanite' for artificial teeth in place of bone, gold and platinum plates which had hitherto been in vogue in Europe and in America. He preferred the 'India Rubber Vulcanised' because it was lighter, more durable and easily adapted to the shape of the gums.[14]

The standards of dentistry at the beginning of the present century were far from satisfactory and the Chief Government Medical Officer had often reported upon the lack of proficiency of some dental practitioners.[15] The state of dentistry improved considerably when, in 1912, Mr. T. Jenkins and Mr. B. H. Martin, who had studied dental surgery in the United Kingdom, started to practise in Malta.[16] Although the Police

---

[8] Archives 1193, fols. 103 and 139, Royal Malta Library.

[9] Archives 1198, fol. 17, Royal Malta Library.

[10] *Il Portafoglio Maltese*, 19th July 1841, p. 1418. *Muir's Malta Almanack & Directory, 1845*, p. 120; *of 1849*, p. 68; *of 1858*, p. 81. *Almanacco di Malta, 1852*, p. 73. *Almanacco Strenna di Malta*, 1876, p. 115.

[11] *Malta Government Gazette*, 1st February 1832, p. 35.

[12] *Muir's Malta Almanack & Directory, 1845.*

[13] *Malta Times*, 6th April 1847, p. 4; 12th October 1847, p. 4.

[14] *The Malta Observer*, 27th January 1860, p. 4.

[15] Debates of the Council of Government, vol. xxiv, 1899–1900, p. 671.

[16] Fiorini, J., *The History of Maltese Dentistry*, Malta, 1953, p. 6.

Laws of 1883 required surgeon-dentists to obtain a licence from the Head of the Government before they began to practise dentistry,[17] it was not until 1901 that Ordinances VII and XVII enforced the production of a certificate from the Medical Board showing that the applicant had obtained a diploma from the university or other specially authorised school in Malta. Those persons, however, who had been allowed to practise dentistry under the provisions of an Act of the Imperial Government were exempted from this provision.[18] The conditions under which the Diploma in Dental Surgery was granted by the university were laid down in Section 237 of the Statute.[19] The candidate sitting for the examination had to produce certificates showing that he had pursued his studies in dentistry in a recognised institution abroad; had been engaged for four years in professional studies; and had received three years instruction in mechanical dentistry from a recognised practitioner or at a dental hospital.

In the field of dentistry the university was simply an examining body until 1921 when measures were taken to establish a course of studies for the Diploma of Dental Surgeon. The course was open to students in possession of the matriculation of the university or an equivalent examination and the diploma was awarded to candidates who, besides passing examinations in the subjects listed in the Statute, submitted proof that they had spent at least five years in the practice of dental surgery at a teaching school or under a teacher approved by the General Council of the University.[20] In July 1936 the Diploma of Dental Surgery was recognised by the General Medical Council of the United Kingdom as entitling its holders to register without examination in the United Kingdom as Colonial Dentists in the Dentists' Register.[21]

The programme of studies was revised in 1943 and the course extended over a period of four years. The Degree of Bachelor of Dental Surgery (B.Ch.D.) was introduced and granted to the candidate who had already obtained the Diploma of Dental Surgeon and satisfied other conditions such as one year's practice in an approved dental clinic, presentation of a thesis on a dental subject and submission to an oral examination lasting not less than forty-five minutes.[22] A further reform took place in 1947 when the Diploma in Dental Surgery was abolished and the duration of the course leading to the Bachelorship was increased to six years.[23]

In spite of its short life, the Maltese dental profession has achieved such progress and distinction that its reputation was soon established in the international field. At the Eleventh International Dental Congress of the Fédération Dentaire Internationale held in London in 1952, the delegate representing the university and the Dental Association of Malta was appointed Vice-President of the Dental Education Section.[24] On the same occasion and as a further sign of the esteem which the Maltese dental profession enjoys in the United Kingdom, the honorary degree of Fellow of Dental Surgery was conferred on the delegate by the Royal College of Surgeons of Edinburgh.[25]

---

[17] *Police Laws*, Malta, 1883, p. 39.

[18] *Malta Government Gazette Supplement*, 30th May and 2nd July 1901.

[19] *Statute of the University and Lyceum of Malta*, Malta, 1907, p. 41.

[20] *Statute of the University of Malta and Regulations*, Malta, 1921, p. 20. *Malta Government Gazette Supplement*, 15th July 1921, p. 200.

[21] *Calendar of the Royal University of Malta*, Malta, 1946, p. 210. *Malta Government Gazette Supplement*, 22nd January 1937, p. 20.

[22] *Statute and Regulations of the Royal University of Malta*, Malta, 1943, p. 37.

[23] *Statute of the Royal University of Malta enacted in force of Ordinance XXXII of 1947*, Malta, p. 91.

[24] *Times of Malta*, 18th July 1952, p. 7.

[25] *Times of Malta*, 18th November 1952, p. 4.

PART IX

THE NINETEENTH CENTURY

CHAPTER 50

Famine and Disease

THE PLIGHT IN THE COUNTRYSIDE

THE Knights of the Order of St. John of Jerusalem remained masters of Malta until the closing years of the eighteenth century, when out of the upheaval of the French Revolution, Napoleon emerged with his plan to extend his empire to Egypt and India. This dream could not be realised so long as Malta stood in his way; so on the 12th June 1798 he appeared off the Island with a mighty fleet and wrested Malta from the Order of St. John in a swift and bloodless victory. He left the Island after a stay of six days leaving a garrison of six thousand men under the command of General Vaubois to hold the Island.[1] During his brief sojourn in Malta Napoleon initiated sweeping reforms in the social, political and religious institutions of the Island for which the people, still steeped in medieval ways of life and thought, were not prepared. These sudden changes in the life of the community exasperated the Maltese to such an extent that they rose against the French and penned them within the fortifications of Valletta and the three cities of Senglea, Bormla and Birgu. These events took place on the 2nd September 1798.

Immediately after their revolt the leaders of the Maltese formed themselves into a National Assembly. They acknowledged King Ferdinand of Naples and Sicily as their ancient and lawful sovereign and at the same time appealed to Lord Nelson, who was King Ferdinand's ally, to come to their aid by blockading the French inside the Grand Harbour. This plan had the effect of ensuring a free passage to Maltese ships sailing from the ports of St. Paul's Bay and Marsaxlokk for procuring provisions from Sicily.

The whole of the countryside was under the control of the insurgents but most of the corn of the Island was stored in the granaries inside Valletta in the hands of the French so that, in the words of the Maltese deputies, the countryside was completely denuded of all food.[2] The quantity of wheat that the Island could grow sufficed to feed only one-third of its inhabitants. The threat of starvation with its consequent baneful effects on the health of the population was, therefore, a very real one. Indeed subsequent events amply showed that the outcome of the struggle between the French and the Maltese hinged solely on the supply of food and the health of the two parties in the conflict.

---

[1] Robert, *Mémoire sur la topographie physique et médicale de Malte*, Paris, 1802, p. 6.

[2] Hardman, W., *A History of Malta*, London, 1909, p. 113.

In answer to the appeal for help of the Maltese deputies, Nelson interceded with the King of the Two Sicilies and induced him to furnish the insurgents with the necessary food supplies. The need for corn was urgent. By the 25th October 1798 the position with regard to food had become very disquieting. Small coasting vessels were sent to Sicily for corn but actually ship-loads were required to replenish the stock. 'At the present moment', pleaded the Maltese to Nelson, 'nothing else makes us anxious but the scarcity of wheat.'[3] To render the situation more distressing, disease in the form of a 'malignant fever' spread among the insurgents at the end of 1798 so that by the beginning of the following year, owing to famine and sickness, discontent had grown rife among them. Some wheat was eventually procured from Sicily but by the end of January 1799 almost all of it had become exhausted. What made matters worse was the fact that no more funds were available for the purchase of corn from abroad. All private and public property was, therefore, hypothecated to enable the insurgents to obtain grain on credit from Sicily. 'Our desolation is complete', the Maltese leaders told Nelson on the 26th January 1799, 'and the urgency is inexpressible.' By the end of January there was not sufficient bread for one day. Complaints were heard that hoarding of wheat and barley was taking place at Qormi village where unscrupulous dealers were selling them at exorbitant prices.[4] The ferment occasioned by the dearth of bread was such that the people threatened to make an example of some of their leaders had they not been prevented from doing so by Captain Alexander Ball who was in charge of the British naval squadron.[5] Fortunately the situation was saved by the capture of a ship from Sicily laden with corn and of another vessel with salted meat both of which were suspected of being bound for the French in Valletta. The cargo was sold to the insurgents but the respite afforded was a short one.

A fresh supply of wheat was promised by the King of the Two Sicilies at the beginning of February 1799 but its delivery was delayed. One of the chief leaders of the Maltese thus wrote to Nelson on the 5th February: 'We are reduced to the greatest straits for the rich no longer exist and the poor are dying of hunger. In all directions disease and death are rife for want of food . . . Your Excellency may remain assured that from present appearances we shall be compelled within a few days to lay down our arms and abandon our positions.' Thanks to the intervention of Nelson and Sir William Hamilton some provisions were sent from Sicily and the crisis was tided over for the time being. These supplies did not, how-

[3] Hardman, W., *op. cit.,* p. 136.

[4] Manuscript 192, no pagination, Royal Malta Library.

[5] Hardman, W., *op. cit.,* pp. 169 and 188.

ever, last for long and the people, tired of their sufferings, became so disheartened that they contemplated coming to terms with the French.[6]

The 'fever' had meanwhile assumed epidemic proportions and this contributed in no small measure to lower the morale of the people still further. 'The miseries and wretched poverty of the Maltese', Captain A. Ball told Nelson on the 31st March 1799, 'have caused a malignant fever to break out which has swept off a number of the troops as well as inhabitants. All the Portuguese and Neapolitan officers are sick and some in a very dangerous way.' A medical service was set up for the troops. We hear of a Dr. Francesco Caruana with the Tarxien, Dr. Ludovico Balbi with the Zabbar and Dr. Nicola Bezzina with the Zejtun Battalions. There were no fewer than twenty-three doctors with the Birkirkara battalion but many of them were engaged in combatant duties. Their exertions against the fever availed nothing for it continued to spread, creeping also into Captain Ball's ships. The stricken sailors were taken ashore and accommodated in a house in an 'airy situation'. This house, the whereabouts of which Ball fails to give, constituted the first British naval hospital to be set up in the Island.

Hunger no less than disease was also claiming its victims at this juncture. This is not to be wondered at when we learn that at the time the insurgents received their last supply of wheat they were within two days of absolute starvation. April proved to be a most trying month. The fever still raged with violence. Its mortality reduced the number of troops while insufficient nourishment caused disaffection among those who were spared by disease. Sir Thomas Troubridge was obliged to give all his flour to the insurgents to save them from starving to death. This measure tided them over a most harrowing period until some corn reached the Island from Sicily towards the end of the month. The control of the fever, however, proved to be beyond human skill and so many of the armed peasants were dying daily that in August Captain Ball had to land marines from the blockading ships to strengthen the posts guarded by the dwindling Maltese troops. Of one thousand five hundred men under arms only six hundred were fit to attack enemy positions. The marines, too, soon sickened.[7]

At the end of August 1799 the position with regard to corn again became precarious—only ten days' supply being left in the Island. The Maltese deputies turned to Nelson to ask the King of the Two Sicilies to replenish their empty granaries, which Nelson succeeded in doing at the beginning of November, but this problem of victualling Malta remained a constant source of anxiety throughout the whole campaign. In December 'the poor brave and loyal inhabitants' of Malta were again on the point of surrendering to the French from extreme hunger. A supply of six weeks was secured in time for the armed peasants but only a small quantity could be spared for the rest of the inhabitants. So many of them had

[6] Hardman, W., *op. cit.*, pp. 179 and 203.

[7] *Ibid.*, pp. 208, 224 and 259.

become impoverished that they would not have been able to buy bread even if it were available in sufficient amounts. To make up for this scarcity of bread communal kitchens were established. Those set up by the Municipality of Mdina in two convents in the ancient capital fed six hundred pauper persons daily.[8]

On the 1st January 1800 Sir Thomas Troubridge wrote to Nelson: 'We are dying off fast for want . . . A short time will decide the business. We shall be obliged to leave the place for the want of provisions . . . I am not very tender-hearted but really the distress here would, if he could see it, even move a Neapolitan.' The allusion was to the Court of the King of the Two Sicilies whom Troubridge rightly blamed for the plight of the Maltese; but Troubridge did not content himself with simply pleading for food. He took strong measures to secure it even though these were in open defiance of international law. In fact he ordered his ships to capture any vessel laden with corn which they came across but as none was found he resorted to the high-handed step of sending his ships to Sicilian ports with orders to seize vessels laden with corn if the merchants refused to sell it.[9] Two such vessels were captured and brought to Malta. Thanks to Troubridge's courage and determination, starvation was staved off while the Sicilians, having taken the hint, sent further supplies later on. The health of the inhabitants and troops, however, continued to suffer severely. The hospitals in the hands of the insurgents were Santo Spirito Hospital, normally containing forty beds, and Saura Hospital with eighty beds. Their combined bed complement was insufficient to accommodate the number of patients that flocked to these hospitals from all over the countryside including the war casualties and the Portuguese and Neapolitan servicemen who fell ill while on the Island. To cope with this rush of patients emergency hospitals were established in Rabat and Mdina. The so-called Great Hospital, set up in St. Dominic's Priory at Rabat, was the largest of them and catered for both men and women. The church of St. Francis, adjoining Santo Spirito Hospital, the Bishop's Seminary at Mdina, the church of St. Sebastian and of St. Agatha were also put to the same use. Throughout the campaign physicians and surgeons laboured indefatigably, rendering their professional services '*gratis et amore*' not only in the hospitals but also in the homes of the poor.[10] At Zejtun there were two other hospitals—the old church of St. Gregory and the country-house of Bishop Labini. The San Giuseppe Hospital at Zebbug was also taken over by the insurgents. The establishment of a military hospital was rendered necessary by the increased incidence of sickness among the British troops. It was set up at Zejtun in the house of Count A. Formosa de Fremeaux.[11] By the time the French surrendered in September 1800 disease and starvation had taken a heavy toll of the inhabitants. It has been estimated that out of a population of one hundred thousand souls some twenty thousand perished through sickness and hunger.[12]

---

[8] Manuscript 192, no pagination, Royal Malta Library.

[9] Hardman, W., *op. cit.*, pp. 254 and 255.

[10] Manuscript 183, fols. 26–29, Royal Malta Library.

[11] Mifsud, A., *Origine della sovranità inglese su Malta*, Malta, 1907, p. 259.

It was then believed that the fever which caused so much havoc originated from the 'bad air' emanating from a marsh that existed at the Marsa. It is now impossible to determine the real nature of the malady as no description of the clinical features of these fevers has come down to us. Contemporary documents refer to them as 'the tertian fever that became malignant' or 'the grave fatal epidemic of malignant fevers' or the 'mortal contagious influenza'.[13] A layman, a certain Clemente Mifsud Bonnici, claimed in a petition addressed to Captain Ball in 1801 to have discovered the cause of the 'pestiferous' malady and to have been responsible for the recovery of all the patients of the Zejtun hospitals; he has, however, left us completely in the dark as to the nature of his discovery and treatment.[14] Dr. J. Hennen, writing some twenty years after the insurrection, expressed the opinion that the disease which decimated the insurgents was a 'low typhus, having its origin in bad and deficient food, anxiety of mind, fatigue, filth and poverty'.[15] These remarks do not help us to identify the illness either with the typhus or with the typhoid fevers with which we are to-day familiar. A more useful suggestion that has been put forward blames malarial infection for the causation of the fevers.[16] The presence of marshy areas at the Marsa, as already mentioned, and the discovery, half a century ago, of the mosquito *Anopheles maculipennis* in the Island lend great weight to this suggestion.

THE MISERY IN THE TOWNS

No less pitiable were the sufferings endured by the French and the Maltese blockaded inside Valletta and the three cities. Five days before the insurrection broke out, news had reached the French in Malta that the whole of their fleet had been destroyed by Nelson at the Battle of the Nile. General Vaubois, expecting the British fleet to intercept all vessels directed to Malta, examined the state of corn in the store-houses and found that he had enough to supply the Island for seven months; but since as many as one thousand six hundred residents had abandoned the cities following the insurrection, he estimated that his provisions of corn could be made to last from sixteen to seventeen months.

The French were given the opportunity to surrender early on in the siege but they were determined to hold on to the last extremity. Meanwhile the Portuguese and British Fleets came to the aid of the Maltese and blockaded the French by sea. Thus cut off, the French had no chance of obtaining fresh provisions except by raiding the countryside. A sortie was tried near Zabbar but the French plans miscarried and Vaubois's troops were forced to retreat inside the bastions by the insurgents. To decrease the number of mouths to be fed in the towns, an effort was made on the 29th September to send all convalescent patients from the Civil Hospital into the countryside but many of the sick died before reaching the trenches of the Maltese.[17] The pinch of hunger was making itself felt. On the 7th October Vaubois wrote to his Government: 'We have no meat, we have no wine, we have no brandy; we lack all eatables in general except corn.' By the 19th November the appeals of Vaubois became more insistent. '*Comptes sur notre courage*', he stated, '*mais de vivres, à tous prix et à tous risques.*'[18] The French were already reduced to such straits that fat cats were fetching five 'scudi' (about 8*s.* 4*d.*) each at this period.[19] The streets of Valletta were thronged with beggars. Vaubois got rid of them by suspending the distribution of charity-bread and sending them out of the towns.

---

[12] Hardman, W., *op. cit.*, p. 331.

[13] Manuscript 183, fols. 3t, 26 and 27, Royal Malta Library.

[14] Mifsud, A., *op. cit.*, p. 264.

[15] Hennen, J., *Sketches of the Medical Topography of the Mediterranean*, London, 1830, p. 501.

[16] Critien, A., 'On Short Commons', *Scientia*, 1950, xvi. 176.

At the beginning of December, the French inside Valletta were subjected to an artillery bombardment lasting a few hours. No one was hurt but the inhabitants were so terrified that many asked to be allowed to abandon the city. Vaubois, while disinclined to let the wealthy residents leave the city, found no objection to the departure of those who were merely a drain on his scanty resources; besides, by allowing the townspeople to take refuge in the countryside, he increased the strain on the food supplies of the insurgents who like himself were faced by starvation. By December, twelve thousand persons had left the towns.[20]

Deficiency diseases resulting from undernourishment made their first appearance among the besieged towards the end of December 1798. Scurvy spread among the troops and civilians, making great progress between January and March 1799. Four hundred cases of scurvy, the majority of which were also associated with night-blindness, are known to have occurred among the troops alone.[21] Night-blindness became so widespread that, according to information sent by Lieutenant J. Vivion to Lord Nelson on the 25th June 1789, 'nearly one half the sentinels on the ramparts at night are blind, occasioned as they suppose by the poorness of living'. Civilians were also affected in great numbers.[22] Vaubois attributed this 'cruel malady' to '*l'air vif et salin*' of the Island. Vapour baths were prescribed but while some of the soldiers regained their sight others lost it and Vaubois was unable to check the progress of this illness.[23]

During the first three months of 1799 bread was still available but bacon, salted meat, beans and rice were to be had only in very small amounts. Firewood for the bakeries became unobtainable after six months of the siege and as a last resort old trading vessels, unfit for service, were broken up.[24] The price of food soared until in March it stood at the following levels (the value of the English currency is that obtaining in 1800): fresh pork 2*s.* 10*d.* a pound, cheese 2*s.* 6*d.* a pound, a rabbit 6*s.* 2*d.*, a fowl 24*s.* 10*d.*, a pigeon 5*s.*, a bottle of wine 2*s.* 6*d.* and an egg 4*d.* To form an idea of the extraordinary increase in the prices of provisions it is important to note that before the blockade a pound of meat cost 3*d.*, a fowl 6*d.* and a bottle of wine 3*d.* 'The position is such', wrote Vaubois on the 1st April 1799, 'that we are weak, extremely weak, and we have diminished in numbers by more than one-fourth owing to sickness.'[25]

---

[17] Cutajar, F., *L'occupazione francese di Malta nel 1798*, Malta, 1933, pp. 60–61.

[18] Hardman, W., *op. cit.*, pp. 131 and 142.

[19] Cutajar, F., *op. cit.*, p. 72.

[20] Hardman, W., *op. cit.*, p. 584.

[21] Robert, *op. cit.*, p. 41.

[22] Ransijat, B., *Assedio e blocco di Malta*, Malta, 1843, p. 124.

[23] Hardman, W., *op. cit.*, pp. 216, 596 and 605.

Scurvy was the greatest killer at this time, thirty-seven dying of it in March, forty in April and ninety-eight in May.[26] Phthisis was also widespread, and in all well over six hundred soldiers were in need of hospital treatment at this juncture. The Infirmary proved too small to accommodate all the men requiring hospitalisation and three other hospitals had to be improvised by the end of June 1799.[27] Vaubois did his utmost to preserve the health of his troops who, even had they all been in perfect health, were scarcely sufficient to perform the daily duties required in the towns. He, therefore, took it upon himself to inspect the hospitals, to correct the abuses that had crept into their administration, to visit the bakehouses and examine the bread issued to the troops. The sick were provided with a liquor made with malt from which they received much benefit. The lot of civilians underwent no change. 'One sees nothing but walking skeletons', Vaubois told his War Minister. That his statement was not exaggerated is shown by the fact that the death rate among civilians stood at over twenty a day.[28]

The British blockade was so tight that during the first year only fifteen vessels with stores and provisions managed to enter port. In spite of the quantities of corn brought in by these ships and of the reduction of the urban population from forty thousand to nine thousand by the beginning of October, it was still found very difficult to supply even this number of persons with the necessities of life. Bread and corn had been very generously distributed at the beginning of the siege but with the prolongation of the blockade the quantity distributed steadily decreased and its quality deteriorated. Butchers' meat disappeared from markets. Fish, too, was insufficient to meet the demand as the hospitals had priority.[29] The price of cheese rose to 7*s.* 3½*d.* a pound, a fowl fetched from £2 3*s.* 4*d.* to £2 10*s.*, a pigeon cost 10*s.*, an egg 8*d.*, sugar 18*s.* 4*d.* per pound and coffee £1 1*s.* 8*d.* a pound. Rats were caught to supplement the family larder and were bought for 1*s.* to 1*s.* 7*d.* each. Beans and other vegetables were extremely dear when they could be procured. There was a great demand for flesh of mules and asses; and the inhabitants complained bitterly when they could not obtain any.

---

[24] Ransijat, B., *op. cit.*, p. 78.

[25] Hardman, W., *op. cit.*, pp. 595 and 606.

[26] De Boisgelin, L., *Ancient and Modern Malta*, London, 1805, pp. 121–156.

[27] Robert, *op. cit.*, p. 43.

[28] Hardman, W., *op. cit.*, p. 613.

[29] *Collezione di bandi*, Malta, 1840, p. 174.

The scarcity of provisions induced civilians and soldiers to grow their own food and to rear chickens, pigeons and rabbits. Their efforts were so successful that by the beginning of the second year of the siege the prices of these items of food fell markedly. The soldiers made vegetable gardens in the ditches and fortifications of the towns. In this way they managed to raise vegetables and fruits not only for their own consumption but also for sale. This temporary relief from hunger was offset by the appearance of a new menace to health. The month of October was marked by an outbreak of an intestinal infestation with worms which in a short time assumed epidemic proportions. These worms—the *Ascaris lumbricoides*—were of an extraordinary size and volume. They produced fever and abdominal colic and invaded their hosts in such numbers that as many as two hundred of them were evacuated by one single person following the administration of emetics and purges. In some instances these worms were evacuated through the mouth, choking the patient in the process. By January 1800 the epidemic raged with such extreme violence that many a person was suddenly struck down dead. Post-mortem examinations of these cases revealed the presence of immense quantities of worms blocking the stomach, gullet and the intestines, the walls of which were found to be extensively eroded. These sudden deaths added to the already great consternation of the troops and inhabitants. Everyone started taking vermifuges as a preventive, including Dr. Robert, the Chief Military Physician, who got rid of 'twelve worms of an astonishing size and volume'.[30] The epidemic declined in the following spring but by then the food situation had become desperate.

A convoy of ships had been daily expected from Toulon but it was intercepted and captured by the British fleet. After this blow Vaubois lost hope of receiving any further help from France. Having decided that it was no longer possible to hold the fortress for any length of time he summoned a council of war to discuss the situation. It was resolved to send a man-of-war to France to obtain succour. The *Guillaume Tell* accordingly left port on the 29th March 1800 loaded with all the sick in the garrison, but she was immediately discovered by the British navy and captured. Vaubois now realised that he would soon be obliged to surrender. The population had fallen to seven thousand five hundred but the means of subsistence were so low that not more than thirty ounces of bread per head per day could be issued. To relieve the distress and misery around him Vaubois decided to slaughter all the horses and mules that had been spared for the public use, but these animals were still needed for grinding the corn. It was therefore resolved to kill them as soon as the corn was reduced to flour. All hands were consequently employed to finish the grinding of corn with the utmost speed. The houses throughout the cities were searched to ascertain that no hoarding of provisions was taking place but instead of concealed food the officials discovered the 'heart-rending spectacle of the most distressing poverty'.[31]

---

[30] Robert, *op. cit.*, pp. 64 and 67.

Towards the end of June the bread ration was one pound and a half per day for a man and one pound for a woman; children received proportionately less. Prices continued to rise and reached fantastic levels. Oil sold at £1 3*s*. 4*d*. per bottle, sugar £2 per pound and coffee £2 8*s*. a pound. Large rats, especially those caught in the bakehouses, were much in demand and fetched extremely high prices. At the beginning of the siege Vaubois had declared that he would hold Malta until there were no more cats and no more dogs to be eaten;[32] that time had now come, for almost all the dogs and cats had been consumed. Asses, mules and horses had shared the same fate. The only article of sustenance which they did not lack was water because, although the Wignacourt Aqueduct which supplied Valletta was cut off by the insurgents, the cisterns connected to the houses and hospitals contained sufficient water for the needs of the garrison and inhabitants.[33]

By mid-July the situation had become hopeless. Vaubois continued to press for provisions. He complained to his War Minister: 'The poor people are perishing of misery. Dysentery has broken out. Everyone, citizens and troops, is infested with worms . . . To these hardships must be added the terror of bombing experienced by the women . . . This misery would horrify you!' Some time later he wrote to the Minister of Marine: 'Courage and determination are not lacking but the stomach commands both. We have become used to very little but that very little must be had'.[34]

The much needed food supplies never came. Vaubois waited for another month and a half but seeing no possibility of relief and having only three days' scanty bread rations for his garrison and citizens he could no longer hold out against famine and illness, and on the 4th September 1800 he was forced to capitulate to the besiegers. Vaubois's fight against hunger and disease is certainly one of the most tenacious and memorable in the history of mankind. With the capitulation of the French the Maltese Islands passed into British hands at the dawn of the nineteenth century.

---

[31] De Boisgelin, L., *op. cit.*, pp. 121–156. Ransijat, B., *op. cit.*, p. 204.

[32] Hardman, W., *op. cit.*, p. 142.

[33] Townsend, G. F., *The Sea-Kings of the Mediterranean*, London, 1872, p. 269.

[34] Hardman, W., *op. cit.*, pp. 637 and 639.

CHAPTER 51

Landmarks of Progress

From 1800 to 1840 medical practice in Malta swung between two extremes—that of the polypharmacy then in vogue in the British Military Hospital and that of some exclusive system of treatment fashionable in Italy. There was, however, a third more balanced practice—the so called 'philosophical method', advocated by Dr. T. Chetcuti, which was based on the observation of the natural history of disease, reliance on the recuperative powers of nature and the rational and timely use of the 'few really efficacious drugs' at the physician's disposal.[1] This rational approach to illness gained ground with the passage of time and ultimately displaced the 'systems' that had previously divided the profession into partisan camps and rival factions.[2]

LEECHES

One form of therapy that formed the bed-rock of practice and that persisted almost until the end of the century was the use of leeches to allay pain in swollen parts, to diminish congestion in inflamed regions and to provoke menstruation by applying them to the lower abdomen. These animals were purchased by tender by the Civil Hospital management. The contractor, who had to submit a sample of fifty leeches before being awarded the contract, bound himself to supply the quantity required for a whole year by the Charitable Institutions[3] and to keep in hand a stock of five thousand leeches ready for service subject to a penalty of £40 in case of failure. Their price varied, in 1840, from six to ten shillings per hundred leeches which had to be of 'first class quality, in perfect health and fit for the use and effect required of them by the medical art'. Before acceptance from the contractor they were examined and approved by the Senior Physicians and the pharmacist.[4]

Interruptions in the provision of leeches sometimes occurred either because of their inferior quality or because of the exhaustion of the reserve stock or because of delay in their importation from Tunis and Bône on account of bad weather.[5] In 1840 the Civil Hospitals were using 2,600 leeches per month. Sometimes as many as twenty-four leeches were applied simultaneously to the same part to relieve pain and swelling.[6] To control the excessive consumption of these animals, instructions were issued to the medical officers to resort more frequently to cupping, as was being done at the Military Hospital.[7] That little or no heed was paid to these instructions is shown by the fact that in 1851 Santo Spirito Hospital, with an average population of twenty-five patients, was demanding three hundred leeches a month. The consumption at the Central Hospital in June 1855 seems to have been no less considerable for directions were issued to the hospital employees with a view to preserving the leeches for more than one application. The practice of keeping them in wood ashes was discontinued. Instead they were washed in fresh water, when they dropped from the patient, and a pinch of salt placed on their mouths.[8]

---

[1] Chetcuti, T., *Discorso inaugurale*, Malta, 1846.

[2] Terrario, G., *Pensieri medici secondo i principj Browniani*, Malta, 1809.

[3] *Il Portafoglio Maltese*, 31d June 1844, p. 2694.

[4] Letters Issued from 16th April 1847 to 30th December 1853, fol. 6. Letters to Government from 7th January 1859 to 31st December 1831, fol. 43, Medical & Health Archives, Valletta.

It is of interest to note that up to thirty years ago leeches were still used in popular medicine and could be obtained from a small shop at Qormi. The creatures were found stuck to the mouths of cattle imported from North Africa.[9]

CLINICAL INSTRUMENTS

The use of the stethoscope and of the pleximeter for the examination of the chest was being advocated in Malta in 1838. In the same year the employment of the microscope for the analysis of the solid constituents of the urine was also being recommended to clinicians.[10] This instrument had become so well known by 1853 that the Governor donated one to the Literary Cabinet of Zebbug village[11] in that year. By 1872 both the microscope and the spectroscope had become familiar tools in the hands of the medico-legal experts for the examination of blood stains while urine analysis and the microscopic examination of sputum were being carried out at the Central Hospital.[12] The ophthalmoscope had at least one cultivator in 1843—a Dr. Giuseppe Clinquant who, on the 16th November, read a dissertation on it at a meeting of the 'Società Medica'.[13]

---

[5] Letter Book from 2nd January 1838 to 28th April 1842, fols. 98 and 100. Letter Book from 27th May 1842 to 12th April 1847, fols. 4, 139 and 208, Medical & Health Archives, Valletta.

[6] Arpa, S., *Di un caso particolare di gravidanza extra-uterina*, Malta, 1843, p. 7.

[7] Letter Book from 2nd January 1838 to 28th April 1842, fol. 100, Medical & Health Archives, Valletta.

[8] Hospitals from 22nd January 1851 to 20th June 1856, fols. 11 and 117, Medical & Health Archives, Valletta.

[9] Spiteri Maempel, J., personal communication, 29th June 1960.

[10] *L'Ape Melitense*, 1838, i. 25, 94.

[11] *L'Ordine*, 27th May 1853, p. 4093.

[12] *Il Barth*, 9th March 1872, p. 109; 22nd July 1873, p. 318.

[13] *Storia della Società Medica d'Incoraggiamento*, Malta, 1845, p. xli.

Ten years later, when he was Junior Physician at the Central Hospital, he was elected corresponding member of the Imperial Society of Medicine of Marseilles on the strength of a paper on ophthalmoscopy which he submitted to this association in April 1853.[14]

Clinical thermometry was a common procedure by August 1866 in which year a British Military Surgeon recorded, and later published, the thermometric observations and charts of sixty-seven fever cases.[15]

The hypodermic syringe was in use among army surgeons in 1860 and among civilian doctors in 1873.[16] The sphygmograph was employed by 1888.[17]

An X-ray apparatus was ordered from England through the Crown Agents in May 1899.[18]

OPERATING THEATRES

An operating room was in existence in the Civil Hospital for men in 1822 but it must have been set up earlier than that for on the 3rd December of that year a request was made for its enlargement by the Permanent Committee of the Charitable Institutions as they intended to use it as a 'School for the Study of Surgery and Anatomy'. In 1840 operations were performed in the Anatomical Amphitheatre.[19]

The Central Hospital, which replaced the Civil Hospital, was equipped with an operating room at its opening in 1850. This room was furnished with an 'operating table and stool, four circular high-backed benches and glass cases for preparations and instruments'. A reading room was attached to it.[20] The operating room was not, at least in its early years, exclusively reserved for the performance of surgical operations; it is indeed strange to read that in 1854 the Inspector of Charitable Institutions directed that the arms and ammunition of the sick soldiers under treatment at the Central Hospital were to be stored in the operating room and that its key was to be handed to the military authorities whenever they required it. In the following year it was also being used as a lecture room by the Clinical Professors.[21]

---

[14] *Il Portafoglio Maltese*, 23rd April 1853, p. 3.

[15] Boileau, J. P. H., Remarks on Fevers in Malta with Cases. Appendix no. XLVII, *Army Medical Department. Report for the year 1866*, vol. viii, London, 1868, p. 478.

[16] Marston, J. A., Report on Fever (Malta). *Army Medical Department. Medical Report for 1861*, London, 1863, vol. iii, p. 517. *Il Barth*, 25th July 1871, p. 24; 2nd May 1873, p. 288.

[17] *Records of the Malta Branch of the British Medical Association, 1888–1917*, meeting of the 23rd January 1889.

[18] Letters to Government from 10th April 1895 to 3rd March 1903, fols. 390 and 401, Medical & Health Archives, Valletta.

[19] *Il Portafoglio Maltese*, 30th November 1840, p. 1154. Permanent Committee from 1st January 1816 to 31st December 1829, fol. 108, Medical & Health Archives, Valletta.

[20] Letters to Government from 9th June 1849 to 26th August 1850, fol. 20, Medical & Health Archives, Valletta.

[21] Hospitals from 22nd January 1851 to 20th June 1856, fols. 93 and 138, Medical & Health Archives, Valletta.

Far from excluding all unnecessary persons from the theatre during operations, the surgeons of the Civil Hospital had specific instructions in 1832 to notify their colleagues and also the medical members of the Permanent Committee whenever an operation of 'particular interest' was to take place, to enable them to watch it. The same procedure was followed in later years at the Central Hospital (1859) when a circular, stating the kind of operation and the date and time of its performance, was sent to the Rector of the University, the District Medical Officers and government hospitals, so that all those interested in viewing it could attend. A similar invitation was sent to service medical officers through the Deputy Inspector of Hospitals and Fleets.[22] This practice was reciprocated by the surgeons of the Military Hospital and was still current in 1864.[23]

SURGICAL INSTRUMENTS

In 1802 a surgeon was charged with the custody of the surgical instruments at the Civil Hospital.[24] In July 1827 the instruments had become unserviceable from the long time they had been in use and a new set was asked for from the General Military Hospital. In October of the following year the hospital surgeon applied for the repair or exchange of a case of instruments for injecting hydrocele, a case of lithotomy and of eye instruments, two cases of scalpels and an aneurysm needle.[25] It seems that the hospital remained with only one set of capital instruments until June 1834. They were deposited in the Male Surgical Division and the Assistant Surgeon on duty kept the key of the surgical press to enable him to send them, when required, to the Female Division without delay. Instruments were allowed to be taken out of the hospital but only on the express sanction of the Permanent Committee.[26] Instruments reported unfit for further repairs were surveyed by a Board composed of the Senior and Junior Surgeons and of the medical storekeeper of the hospital. The items that were condemned by this Board were sold by public auction.[27]

Although batches of instruments were procured from England at different periods, the government was not very lavish in its expenditure when new ones were demanded. The Permanent Committee always tried to obtain them with 'the most economical method' and in 1828 they went to the extent of suggesting that the London makers might exchange some of the old instruments for new ones.[28] Even as late as 1840 the official attitude was to postpone the acquisition of further instruments, the argument being that 'as the service has hitherto been conducted without them it would be advisable to leave them out for the present'.

---

[22] Resolutions of the Permanent Committee from 3rd March 1831 to 23rd June 1834, Medical & Health Archives, Valletta.

[23] Bernard, L., *Sull'utilità e necessità della chirurgia*, Malta, 1866, p. 18.

[24] *Piano per il regolamento dell'ospedale di Malta*, Malta, 1802, p. 81.

[25] Permanent Committee from 1st January 1816 to 31st December 1829, fols. 184 and 210, Medical & Health Archives, Valletta.

[26] Resolutions of the Permanent Committee from 3rd March 1831 to 23rd June 1834, fol. 171; from 7th July 1834 to 9th August 1836, fol. 41, Medical & Health Archives, Valletta.

[27] Charitable Institutions Inspector's Letter Book from 24th December 1853 to 14th August 1858, fol. 22, Medical & Health Archives, Valletta.

Private practitioners were employing the obstetrical forceps[29] but when a requisition for midwifery instruments was made out for the hospital in July 1833 it was turned down by the Permanent Committee without any reason being given.[30] A similar request in 1840 from the Physician and Surgeon of Santo Spirito Hospital elicited the remark from the Purveyor of the Charitable Institutions that 'they (surgeons) never had any such things' and that he doubted 'whether they even had any absolute necessity to make use of them'. At this period it was considered an 'indulgence' on the part of the government to furnish the hospitals with instruments as 'in the Military Service all surgeons or assistants are bound to have their own instruments'. In April 1841 there was only one set of obstetrical tools at the Civil Hospital [31] but years later (1855) more midwifery instruments were obtained from England for the use of the Central Hospital. The opportunity was also grasped in 1850 to acquire other instruments such as trochars for hydrocele, urinary catheters, bougies, specula uteri, lancet cases, Liston's splints and instruments for the trichiasis operation.[32]

Occasionally a few surgical instruments were manufactured by Maltese silversmiths but as late as 1871 private practitioners were not adequately supplied, as at this period instruments were being taken by civilian surgeons on loan from Bighi Naval Hospital.[33]

OTHER APPLIANCES

The Malta Mail of the 26th November 1852 announced that Dr. P. Clinquant had 'prepared of his own invention, an obstetrical bed which may be easily converted to a bed-chair adapted to every sort of parturition for the use of lying-in women' at the Central Hospital. It was placed on show in the Maternity Department where Dr. Clinquant was available to demonstrate 'its various parts, its mechanism and to explain its facility and comfort by which every manœuvre of parturition' could be executed by the obstetrician.

---

[28] Permanent Committee from 1st January 1816 to 31st December 1829, fol. 213, Medical & Health Archives, Valletta.

[29] Camenzuli, G., *Sull'ufficio di medico dei poveri*, Malta, 1848, p. 18.

[30] Resolutions of Permanent Committee from 3rd March 1831 to 23rd June 1834, fol. 126, Medical & Health Archives, Valletta.

[31] Letter Book from 2nd January 1838 to 28th April 1842, fols. 65 and 127. Charitable Institutions Book no. 39, fol. 159, Medical & Health Archives, Valletta.

[32] Hospitals from 12th January 1849 to 31st December 1850, fol. 25; from 22nd January 1851 to 20th June 1856, fol. 133. Dispensaries from 18th January 1849 to 29th October 1856, fol. 19, Medical & Health Archives, Valletta.

[33] *Malta Times*, 4th and 11th April 1848, p. 2. *Storia della Società Medica d'Incoraggiamento*, Malta, 1845, pp. xxvii and 223. *Il Barth*, 25th July 1871, p. 14; 20th April 1872, p. 131; 13th July 1875, p. 19.

Financial provision was made in the same year for the purchase from England of two Resuscitating Apparata for the Port Department Office at the Marina, Valletta, and for the Police Station at Senglea Wharf.[34] In 1855 another such apparatus was kept at the residence of the District Medical Officer at Rabat, Gozo[35] but in July of the following year the Inspector of Charitable Institutions was not satisfied with the efficiency of the system then in operation for restoring 'suspended animation' and recommended the use of a method for resuscitating the drowned that required neither instruments nor medical men. He, therefore, proposed giving the widest publicity to an article on asphyxia written by Marshall Hall and published in Braithwaite's *Retrospect of Medicine* (vol. XXXIII).[36]

Crutches and bucket-legs had been issued to persons with amputated lower limbs previous to the nineteenth century in Malta but the first recorded instance of an individual to be provided with a properly constructed and jointed artificial limb belongs to the year 1864. The patient was a Maltese soldier who had his right forearm amputated by Dr. L. Bernard, then a surgeon in a Maltese regiment, following a comminuted fracture. Artificial limbs were, in those days, being supplied to disabled soldiers of the Crimean War. Dr. L. Bernard asked for, and obtained, from Chelsea Hospital 'a very ingenious forearm consisting of a leather tube perfectly equal in its dimensions to the left forearm'. It fitted over the stump and was attached to the lower end of the arm by means of straps. At its inferior extremity it had a screw to which could be attached a spoon, a fork and a knife with which the man could eat comfortably and, when these were removed, they could be replaced by a hook with which he was able to carry bundles and other objects.[37] Years later a few orthopædic appliances were constructed by local craftsmen.[38] In 1880, for instance, an artificial leg which in England cost £12, was made by an employee of the Central Hospital for only £2.[39]

OPERATIVE AND TRAUMATIC SURGERY

According to the rules of the Civil Hospital published in 1802 the surgeons were expected to perform 'all the operations that were needed'[40] after due consultation with their surgical and medical colleagues if they thought fit. A consultation in the case of 'capital operations' was still imposed by the hospital regulations of 1885.[41] The operations current in Malta in the eighteenth century such as amputations, lithotomies and lithotrities, removal of tumours and eradication of fistulas, etc. continued to form the main work of the surgeon in the early decades of the nineteenth century. In 1814 the Principal Surgeon, Dr. Lorenzo Sammut, performed the puncture operation of the tympanic membrane with good results on an English captain who had been deaf for many years.[42] Ligature of aneurysms, operations for cataract and lachrymal fistulae, suture of intestines following penetrating injuries and repairs of hare-lip were also performed at the Civil Hospital by Dr. G. P. Portelli, Professor of Anatomy and Surgery (1824–38) who had been assistant to Samuel Cooper during the British campaign in Holland of 1813–14.[43]

---

[34] Commissioners of Charity Inspector's Book from 6th May 1851 to 3rd October 1855, fol. 100, Medical & Health Archives, Valletta.

[35] Dispensaries from 18th January 1849 to 29th October 1856, fol. 123, Medical & Health Archives, Valletta.

[36] Inspector's Letters to Government from 31st August 1850 to 13th October 1857. fol. 250, Medical & Health Archives, Valletta.

[37] Bernard, L., *op. cit.*, p. 20.

[38] *Il Barth*, 13th July 1875, p. 19.

[39] Letters to Government from 1st July 1878 to 22nd March 1883, fol. 213. Reference Book no. 19, fol. 53, Medical & Health Archives, Valletta.

[40] *Piano per il regolamento . . .*, p. 7.

Some information is available with regard to the management of fractures in 1818 and later years. After reduction of the bony fragments the limb was immobilised by means of splints and the patient was made to rest on a hard bed to prevent movements of the injured parts as much as possible. The wooden splints were retained in the desired position by bandages and adhesive plaster. Swelling of the soft tissues was combated by the application of leeches and of lead lotion to the skin. In the case of open fractures some of the bandages had to be changed daily, especially in summer, much against the surgeon's wish; but this measure was rendered necessary on account of the intolerable stench of the dressings and of the growth and multiplication of worms in the wound. Trephining was performed to elevate fragments pressing on the brain in fractures of the skull. Movements of the affected limb were initiated as soon as union occurred after twenty to thirty days, the actual length of time depending on the bones involved. Bedsores sometimes developed as a complication.

Of forty-five patients treated by these methods in 1841 thirty-nine were discharged 'perfectly cured', three left hospital before the end of treatment and three died. Most numerous were fractures of the lower limbs, while those of the patella, skull and sternum were very rare. The injuries that ended fatally involved the spine, skull and lower extremities, death being due to abscess formation, gangrene and tetanus.[44]

The treatment of severely wounded and shocked patients, one hundred years ago, consisted in the administration of morphine or a draught of opium to dull their pain and calm them down. Moderate haemorrhage was arrested by the local application of perchloride of iron. Treatment was, in the main, conservative in the case of wounded patients but, whenever possible, the reunion of severed parts and soft tissues, such as fingers, pieces of ear, etc., was attempted to prevent deformities in accordance with Nelaton's ideas. The surgeon, however, did not hesitate to amputate whenever there was the risk of the dreaded development of tetanus. Operation wounds were covered with swabs soaked in glycerine and the dressing was not changed until the third day. Suppuration was still the order of the day but it did not worry the surgeon as long as it was of a 'good character'. Post-operative management consisted in rest in bed, purging with castor oil and rigorous diet for the first three days followed by a portion of chicken and drinks of port wine to sustain the patient's strength.[45]

---

[41] *Instructions for the Guidance of the Principal Medical Officers attached to the Central Civil Hospital*, Malta, 1885, p. 2.

[42] *Il Portafoglio Maltese*, 30th November 1840, p. 1154.

[43] *Il Portafoglio Maltese*, 9th November 1840 and 4th October 1841, pp. 1105 and 1515.

[44] *Il Filocamo*, 15th January 1841, p. 2.

EYE SURGERY

Between 1823 and 1847 Dr. Giuseppe Camenzuli of Bormla, besides operating for hare-lip and removing new growths, also operated for cataract although this was yet 'a most rare, almost fabulous' intervention in Malta in those days;[46] so much so that a needy patient who suffered from cataract in both eyes requested, and obtained, a small sum of money to enable him to proceed to Naples to undergo the operation.[47] This is the reason why Malta became a fertile field for foreign oculists. During a short stay in January 1836 Dr. Emmanuele Casorio, a Sicilian, did cataract extraction 'in the presence of several experienced professors and some medical students'.[48]

At the beginning of November 1840, Dr. Charles Galland, Professor of Anatomy and Surgery at the Malta University, operated for squint.[49] In 1847 the same operation was being performed in Malta by a Dr. Weylandt d'Hettanges. There was no general anaesthesia as yet but Dr. d'Hettanges refrained from using the current means of physical restraint, such as tying the patient, to prevent him from moving during the operation. His method was to have the patient sitting down on a chair with his legs resting on another chair in front of him. This surgeon used the galvano-puncture in cases of 'amaurosis'. The successes he achieved were attested by Dr. T. Spencer Wells and Dr. Francesco Micallef.[50]

In 1856 another Frenchman, Chev. Dr. de Bressy, created a deep impression on contemporary Maltese society by his dexterity as an ophthalmic surgeon. As was then the custom he carried out the operations in the presence of both lay and medical men. His technique has been recorded in the following words: 'His operations are preceded by a short discourse on the features of the case . . . In the midst of his talk he stops for an instant to perform what he had been explaining . . . A few seconds and the most difficult operation is over. The surgeon, leaving aside the needle or the scalpel, resumes his argument and comments on the circumstances of the case . . . In a few seconds we have seen the expert and ambidexterous surgeon depressing double cataracts, constructing artificial pupils, correcting squints, etc. His clinic is continually crowded with persons of all ages and of all classes seeking the benefits of his work.'[51]

---

[45] Bernard, L., *op. cit.*, pp. 18 *et seq.*

[46] Camenzuli, G., *op. cit.*, p. 17

[47] Minute Book from 13th September 1837 to 27th June 1843, fol. 190, Medical & Health Archives, Valletta.

[48] *Malta Government Gazette*, 10th February 1836, p. 41.

[49] *Il Portafoglio Maltese*, 16th November 1840, 1113; 4th October, 1841, p. 1515.

[50] Aldieri, C., *Dello strabismo*, Malta, 1847, pp. 13, 18, and 30.

In 1878 the Maltese surgeon, Professor Lawrence Manché, was operating for squint. Very probably he had been doing so earlier than this date, though certainly not before 1867 when he was still in Paris studying the technique under Liebreich.[52]

ORTHOPAEDIC AND PLASTIC SURGERY

We first hear of these branches of surgery in 1840. On the 10th June of that year an Italian surgeon, then residing in Malta, offered to perform gratuitously a number of orthopaedic operations which, although not unknown in Malta, had not hitherto been performed at the Civil Hospital. The surgeon was Dr. Paolo Fabrizi of Modena who had studied medicine at the University of Pisa (1827) and was practising surgery in Paris in 1839. His offer was accepted and His Excellency the Governor directed that a room in or near the Ospizio at Floriana be allotted to him for a period not exceeding eighty days for the reception and treatment of persons with bodily deformities.[53] Before carrying out the operations he tried them out on the cadaver; in fact he used and dissected seven bodies for this purpose at the anatomical theatre of the university. Eventually a ward was made over to him until February 1841. By this time two Maltese doctors, a Dr. Mallia and a Dr. Schembri, returned to Malta from abroad where they had been studying this branch of surgery.[54]

Fabrizi also performed plastic operations and he has left us a full account of his successful reconstruction of the nose of a young Maltese girl from Tarxien. In those days three principal techniques were in vogue. In the Indian method the skin flap was taken from the forehead, while the French surgeons took it from the cheek. Fabrizi preferred the Italian method in which the flap was taken from the forearm. In this way he avoided the scarring of the face which resulted from the other procedures, which were also sometimes attended with meningitis and even death. He operated with the patient in the sitting position and, needless to say, without the benefit of anaesthesia or asepsis. He immobilised the forearm in proximity to the face by means of bandages wound round the head and trunk, the bandages being fixed with sutures and strips of adhesive plaster to prevent them from slipping. Following the operation he refrained from confining the patient to bed but he allowed her to be up and about as he had observed that 'anxiety and the sinister influence of immobility on the general health aggravated the condition of the patient . . . and were responsible for many operative failures'. After sixty days in hospital the young girl was discharged home with a 'normal nose'. She had become a happy girl not only on account of the aesthetic result obtained but also because she had 'regained her sense of smell and could blow her nose, her voice no longer had a nasal sound and she could take snuff!'[55] Fabrizi's services were so much appreciated that he was recommended to His Excellency the Governor for the grant of a 'testimonial of the approbation of Government for his exertions in the performance' of his charitable work. He was also elected a corresponding member of the Maltese medical association, the 'Società Medica d'Incoraggiamento'.[56]

---

[51] *Il Mediterraneo*, 26th March 1856, p. 8.

[52] Manché, L., *Studi sullo strabismo*, Milano, 1878.

[53] Government Letters to Committee of Government Charitable Institutions from 1837 to 1843, no pagination, Medical & Health Archives, Valletta.

[54] Letter Book from 2nd January 1838 to 28th April 1842, fols. 92 and 107, Medical & Health Archives, Valletta. *Il Filologo*, 14th July 1840, p. 67.

ABDOMINAL SURGERY

The treatment of hernias remained on conservative lines for many years, the patient being relieved by means of suspensories and trusses, for the manufacture of which there was an *ad hoc* employee on the hospital staff ('*braghista*'),[57] but in December 1840 Dr. Charles Galland operated on a young man in the patient's home at Zebbug for the radical cure of hernia. The result was so good that the patient was able to return to heavy work on his farm. Operations for inguinal and crural hernias were also being carried out at the Civil Hospital at this period;[58] a case of strangulated hernia was likewise successfully operated on at the Gozo hospital in 1845 by Dr. Luigi Pisani.[59]

The first recorded laparotomy to be carried out in Malta was done under chloroform anaesthesia at the Central Hospital on the 22nd November 1890 by Professor G. B. Schembri, the Professor of Midwifery (1880–1904). The patient was a woman of twenty-seven years suffering from a cystic adenoma of the left ovary. He did the second laparotomy at a private house in Senglea four days later for the removal of a 'sarcoma' adherent to the omentum and the abdominal wall. Both operations were successful.[60]

The regulations of the Civil Hospital of 1802 laid the duty upon the Principal Surgeon of performing Caesarean section when the case required it.[61] There seems to be no doubt, however, that this operation

[55] Fabrizi, P., *Sopra alcuni punti relativi alla rinoplastia*, Malta, 1841, p. 61.

[56] *Storia della Società Medica . . .*, p. xiv. Minute Book from 13th September 1837 to 27th June 1843, fol. 250, Medical & Health Archives, Valletta.

[57] Registro Decreti Lettere, fol. 21, Medical & Health Archives, Valletta.

[58] *Il Filocamo*, 1st January 1841, p. 5; 1st May 1841, p. 38; 16th December 1841, p. 141. *L'Avvenire*, 22nd December 1849, no pagination.

[59] *Storia della Società Medica . . .*, p. 35.

[60] *La Rivista Medica*, 15th January 1891, pp. 1 and 2. Vella, V., 'Laparotomia in Malta', *Rivista di Ostetricia e Ginecologia*, Torino, 1891, p. 1.

[61] *Piano per il regolamento . . .*, p. 13.

was confined to instances in which the parturient woman died before giving birth to the baby and that surgical intervention was meant to prevent the yet unborn infant from dying with the mother. The position had not changed by 1866.[62] In 1880 Dr. G. F. Inglott recommended Caesarean section on the living woman in preference to the induction of premature labour in cases of pelvic abnormalities,[63] but it was not until 1891 that the first Caesarean operation to be attempted on the living was performed in Malta. It was carried out by Professor G. B. Schembri on the 28th May of that year on a woman with a restricted and rachitic pelvis; both mother and baby survived.[64]

ASEPSIS

Knowledge of the work of Louis Pasteur on bacteria and of the experiments of Lord Lister with carbolic acid to combat sepsis (1865) was being diffused among the Maltese medical profession by 1871[65] but the possibility cannot be excluded that the aseptic technique had already been adopted by surgeons in Malta.

The 'disinfection' of the wards of the Civil Hospital with compounds of chlorine was recommended in 1848.[66] In 1850 the bandages of cancer patients were steeped in chlorinated water for forty-eight hours previous to their being washed; this measure was adopted as an alternative to the 'unnecessary and most extravagant practice' of burning the bandages.[67] In February 1882 disinfection formed one of the items in the programme of studies of the nurses at the Central Hospital. They were expected to enumerate all the disinfectants then in use and to know how to disinfect the room, the bed-linen and clothes of patients suffering from infectious diseases.[68] In 1885 the employment of solutions of corrosive sublimate, of carbolic acid and of ferrous sulphate (green vitriol) was advocated by the Chief Government Medical Officer for the disinfection of the clothes of choleraic patients; and Condy's Fluid for the washing of the hands of those who nursed them.[69]

The regulations of the Central Hospital of 1885 contemplated the holding of post-mortem examinations to ascertain the cause of death or 'for the advancement of science or the instruction of students'. They were performed by the visiting staff but warning was given that due attention was to be paid to keep the wards, particularly the surgical and maternity ones, 'free from cadaveric infection'. To ensure the protection of the obstetrical wards the accoucheur was exempted from performing necropsies in the following year.[70]

---

[62] Bernard, L., *op. cit.*, p. 6. La Ferla, G., *Sull'uso della gomma resina d'asafoetida*, Malta, 1855, p. 22.

[63] Inglott, G. F., *L'aborto ostetrico*, Malta, 1840.

[64] *La Rivista Medica*, 1891, ii. 1. Schembri, G. B., 'Prima operazione cesarea in Malta', *Rivista di Ostetricia e Ginecologia*, Torino, 1891, p. 1.

[65] *Il Barth*, 16th October, 1871, p. 61.

[66] *Storia della Società Medica . . .*, p. 195.

[67] Hospitals from 12th January 1849 to 31st December 1850, fol. 53, Medical & Health Archives, Valletta.

[68] New Organisation of the Central Hospital, 1867, fol. 66, Medical & Health Archives, Valletta.

[69] *Twissijet fuq il mard tal Kollera mahrugin mil gvern*, Malta, 1885, pp. 7 and 8.

Every precaution was being taken by November 1890 to 'ensure complete asepsis' during abdominal operations. Soap and water, perchloride of mercury and ether were used at the Central Hospital to clean the patient's skin before operations. Sterilisation of instruments was an established procedure by October 1891.[71]

LABORATORY WORK

An account has already been given of the discovery in Malta of the micrococcus responsible for undulant fever by Sir David Bruce in 1886 (Chapter 24). At that time British and Maltese physicians were actively engaged in bacteriological work in the Island. In the same year Dr. G. Caruana Scicluna and Sir David Bruce detected Koch's comma spirillum in the recent evacuations of patients during the cholera epidemic that was then prevalent. They succeeded in cultivating the micro-organism with all its characteristic features. It was then still debatable whether cholera was due to a miasm, as held by Professor Max von Pettenkofer, or to a micro-organism although not a few were convinced that it was caused by Koch's spirillum. 'Whatever the pathological importance of it in connection with the production of cholera may be,' commented the Chief Government Medical Officer of the time, 'there it was'.[72]

The typhoid bacillus was being found in 1892 in all fatal cases of the disease investigated by Dr. M. L. Hughes. He also inoculated monkeys with brucella and recovered the microbe from their organs and blood.[73]

In August 1890 an extensive collection of slides for the microscope showing the main pathogenic bacteria then known to medicine was acquired by the university and placed at the disposal of any medical practitioner who wished to study them.[74]

Microscopic examination of organs removed at autopsy was carried out at the Military General Hospital of Valletta in 1860 and probably earlier;[75] in 1891 the same method of investigation was being applied to tissues, obtained during operations, by the pathologist at the Central Hospital.[76]

---

[70] *Instructions for the Guidance . . .*, p. 2.

[71] *La Rivista Medica*, 1891, ii. 1 and 2.

[72] Pisani, S. L., *Report on the Cholera Epidemic in the year 1887*, Malta, 1888, pp. 6 and 18.

[73] Hughes, M. L., 'The Natural History of Certain Fevers Occurring in the Mediterranean', *The Mediterranean Naturalist*, 1892, ii. 299; 1893, iii. 325.

[74] *La Rivista Medica*, 1890, i. 1.

[75] Marston, J. A., *op. cit.*, p. 513.

[76] *La Rivista Medica*, 15th January 1891, p. 2. Manché, C., *Nota sul trattamento incruento dell'epitelioma palpebrale*, Rome, 1909, p. 5. Letters to Government from 1st April 1903 to 10th April 1909, fol. 137, Medical & Health Archives, Valletta.

The chemical analysis of exudates and excretions, of urinary calculi and of the cerebrospinal fluid (removed post-mortem) dates from at least as early as 1840 when it was performed by Dr. G. G. Aquilina, the Professor of Chemistry at the University (1834–59).[77]

MEDICAL JOURNALISM

The medical journal, which originated in France in 1679, became firmly established in Europe by the beginning of the nineteenth century. The pioneer Maltese medical journal made its appearance much later when Professor C. G. Schinas published *L'Ape Melitense* (The Maltese Bee) in the last quarter of 1838.[78] Professor Schinas was born at Constantinople and studied medicine at the University of Pisa. He came to Malta in 1823 when revolution broke out in Greece. In 1833 he was chosen Professor of Medicine at the Malta University, a post which he held until his death on the 10th May 1856.[79]

L'Ape Melitense was written in Italian and, apart from reviews and abstracts from continental medical publications, contained several original papers. Their subject matter ranged from the cholera epidemic of Malta of 1837, Werlhoff's purpura and smallpox vaccination to animal magnetism, phrenology and pharmacology. Professor Schinas was an enthusiastic admirer of Jenner and an active propagandist of primary vaccination in infancy and revaccination in early childhood. He encouraged the new procedures of laboratory investigations but tried to curb the undue optimism of those who saw in the influence of chemistry and physics on medicine an easy solution to therapeutic problems. Only four numbers of *L'Ape Melitense* were issued (September to December 1838). Schinas had to face publication difficulties from the very outset as his publishers could not cope with the ever increasing demand for printed works owing to scarcity of operatives. It must be borne in mind that there were very few printing presses in Malta at that time the reason being that up to the third decade of the century the press was subject to government censorship and there was only one printing press in the Island—the one belonging to the government itself.[80] In fact there had been no newspapers or periodicals at the time of the Order of St. John of Jerusalem, the first paper to be published in Malta being *Le Journal de Malte* during the French occupation of the Island. The press became free in March 1839 but Schinas was able to issue *L'Ape Melitense* six months earlier so that this medical journal was among the very first publications to see the light in Malta following the establishment of the freedom of the press.

Three years later Schinas launched another periodical with the help of a few physicians on the staff of the Civil, Saura and Santo Spirito Hospitals.

---

[77] Fabrizi, P., *op. cit.*, p. 59. *Storia della Società Medica . . .*, pp. 9 and 79.

[78] Cassar, P., 'Maltese Medical Journals 1838–1952', *Melita Historica*, 1952, i. 19.

[79] *Il Portafoglio Maltese*, 14th May 1856, p. 3.

[80] *Il Filologo*, 3rd December 1839, p. 22.

This was *Il Filocamo*, which was first issued on the 1st January 1841 and which also contained articles on general science and education. Only two volumes were published, the last number bearing the date of the 24th December 1842. Its main theme centred round the outbreaks of smallpox of the time and the constant threat of invasion of the Island by plague of which the mode of transmission was still a matter of speculation in 1841. Of great interest are *Il Filocamo*'s observations on the importance of the psychological approach to illness. 'It is necessary', wrote Schinas, 'to evaluate the part played by the psychological factor in the genesis of disease in order to be able to eradicate the illness for psychological causes not only produce disease but also perpetuate it . . . It must also be remembered that, though they may not cause illness directly, they can complicate a physical derangement and make it worse . . . Finally it is important to bear in mind that just as psychological causes may modify the patient's condition, so can physical factors influence his mental state.' These words express in a nutshell the concept of the psychosomatic unity of the human being—a concept that modern medicine is now stressing and applying in its attitude to the treatment of disease.

The third attempt at the foundation of a medical periodical was made by Professor Gavino Gulia (1835–89) who held the Chairs of Forensic Medicine and of Natural History at the University. This Journal—*Il Barth*—was named after Dr. Joseph Barth, the Maltese ophthalmologist (Chapter 46), its first number being published on the 25th July 1871. It was so well received by the profession that nine out of every ten doctors in Malta subscribed to it. Like its immediate predecessor it did not deal exclusively with medical matters but also welcomed papers on local botany and zoology. *Il Barth* is noteworthy for being the first medical publication to invite and to receive contributions in English from British service doctors stationed on the Island. During the six years of its existence it collected enough material to furnish us with a vivid picture of Maltese medical and social life in the early years of the last quarter of the nineteenth century. It tells of the distressing poverty that drove the poor to eat carob pods to appease their hunger; of the great infant mortality and overcrowding in the towns; of the ravages of diphtheria and the appalling state of public hygiene; of the utter ignorance of midwives and the decline in the number of doctors owing to their inadequate remuneration. Against the indifference of all and sundry, the indefatigable *Il Barth* never ceased to raise its voice. It attacked the obsolete notions still current at the time about the transmission of infectious illnesses, it censured the commercial community when, mindful only of their own selfish interests, the merchants protested against the quarantine imposed by the government to prevent the importation of disease from the continent into Malta; it encouraged vaccination and revaccination against smallpox and drew attention to the need for a 'Pro infantia' movement; it popularised Lord Lister's ideas about asepsis and pressed for the publication of vital statistics and of the public health laws drawn up into an apposite code.

Il Barth ceased publication in October 1877. Thirteen years passed before its successor—*La Rivista Medica* (The Medical Review)—appeared on the 15th March 1890 under the joint editorship of Dr. Themistocles Zammit and Dr. Fabrizio Borg. It was written wholly in Italian. Therapy forms the main subject of its various papers such as the application of the faradic and galvanic currents in gynaecology, the use of chloral hydrate and potassium bromide in tetanus and the employment of electricity in the treatment of facial palsy and of Robert Koch's vaccine in tuberculosis. The initial interest aroused by this periodical was not sustained, and it ceased to appear after the 31st January 1892. An attempt was made in 1922 to revive the periodical but only a few numbers were published, the last issue being that of June 1923.

Mention must be made of a popular paper founded in April 1897 by Dr. P. Agius and called *La Saluta Publica* (The Public Health). It aimed at the diffusion of notions of hygiene among the people but it soon became famous for its criticism of the government in general and of the Public Health Department in particular. It ceased to appear by 1898.

The British Medical Students Association (Malta Branch) has been publishing the *Chestpiece* since 1949.

MEDICAL ASSOCIATIONS

The 'Società Medica d'Incoraggiamento' (The Medical Society of Encouragement) was founded on the 16th March 1837 through the efforts of Dr. Gio. Carlo Grech Delicata. It existed until 1870. Its aim was to continue the work of the Medical Academy (Chapter 47) and to help in the diffusion and advancement of medical knowledge and allied sciences. Its members took a great interest in all aspects of medicine and surgery and made their influence felt on every occasion where public health was concerned such as the question of vaccination (1843), the human and bovine epidemics of 1848 and 1849 respectively and the cholera of 1850. The society had corresponding members in Italy, France, Switzerland, Constantinople, Prussia, Egypt, England and America. Its proceedings, from the 1st December 1837 to the 10th October 1849, were published in book form.[81]

The proposal to form a 'Camera Medica' (Medical Chamber) originated from Dr. Federico Bernard and Dr. Andrea Pullicino in October 1884. Forty-two doctors responded to the call and a first meeting was held on the 22nd January 1885. Its main aim was to provide foreign scientific journals and discuss questions of medical interest. Membership was also open to pharmacists.[82] In 1938 there was a suggestion to amalgamate the society and the Malta Branch of the British Medical Association into one organisation under the title of Malta Medical Society (Malta

---

[81] *Statuto della Società Medica d'Incoraggiamento di Malta*, Malta, 1843. *Storia della Società Medica* . . .. Laurenza, V., 'Società culturali in Malta', *La Brigata*, 1932, i. 85.

[82] *Effemeride Medica Maltese*, 1st January 1885.

Branch of the British Medical Association) but nothing came out of it. The 'Camera Medica' is no longer active.

The Malta Branch of the British Medical Association owes its origin to a number of British and Maltese doctors who met at the Station Hospital, Valletta, on the 9th May 1888 and founded the 'Mediterranean Branch' of the Association. Its object was the 'promotion of medical and allied sciences and the maintenance of the honour and the interests of the medical profession'. In August 1888 its title was changed to the 'Malta and Mediterranean Branch', this designation being altered to 'The Malta Branch' in December 1917. Until 1902 members met at the Station Hospital but, as the association never succeeded in securing a fixed seat, meetings were subsequently held in various places including the Public Health Department, the National Museum and the university. The medical library was founded in 1916.

The Medical Officers Union is a registered trade union established on the 3rd February 1954. Its objects include the protection of the interests of the profession, the maintenance of the efficiency and dignity of the medical services and the provision of assistance to its members in their relations between themselves, the government and other authorities.

CHAPTER 52

The Beginning of Anaesthesia

ETHER anaesthesia was introduced in Malta almost as early as in England. In 1842 ether was administered to surgical patients in America to render them insensible to pain but it was not until October 1846 that the method was demonstrated to medical men by Mr. William Thomas Morton. The news of this event reached Malta on the 22nd December 1846 when a correspondent from Boston wrote: 'A curious discovery has recently been made here viz., that by inhaling sulphuric ether for two or three minutes the patient may be thrown into a state of entire unconsciousness for about the same length of time, during which the most serious operation may be performed without suffering. Dr. Morton of Boston, a dentist, has tried it about two hundred times with almost uniform success. It has also been applied at the hospital in great operations . . . It has in a few cases failed owing probably to peculiarity of constitution or temperament or want of skill in the administration.'[1]

Meanwhile (December 1846) ether was being introduced in England and by the beginning of February 1847 reports of painless surgical operations under ether anaesthesia, as carried out in various London hospitals, appeared in *The Malta Times* of the 9th February 1847. A month later the same newspaper, beneath the heading of 'Painless Surgical Operations', published an account of the first use of ether anaesthesia in Malta: 'On Saturday last (the 6th March) at the Royal Naval Hospital the first successful exhibition of the vapour of Ether in Malta was practised. Our readers are already aware that various surgeons in England and America have performed amputations, extracted teeth and effected several other most painful operations without causing the least suffering to the patient. Soon after we made known this important fact to the public of this Island, various experiments were made by Mr. Wells and Dr. Burmester with an apparatus which those gentlemen prepared and afterwards another slightly modified was tried at the Naval Hospital in a case of (partial) amputation of the hand but was only attended by partial success. This being clearly owing to imperfections in the apparatus which allowed admixture of atmospheric air with the vapour of Ether, Mr. Wells wrote to England for Hooper's Inhaler, the instrument which had proved most successful in the London Hospitals. It arrived on

---

[1] *Malta Times*, 22nd December 1846, p. 3.

Thursday (4th March) by the *Oriental* (a Peninsular and Oriental Line steamer) and an officer in the Naval Hospital about to undergo an operation, having expressed a wish to experience its effects, was subjected to the action of the Ether on Saturday. Mr. Wells administered the vapour and Dr. Watt performed an operation requiring two large and deep incisions without the patient suffering the least pain. After inhaling for nearly two minutes he became quite insensible; the incisions were then made and he did not make the slightest motion nor did the expression of his features change in the least. After about two minutes he came to and said that he had felt himself as if flying over the heads of the by-standers, that the sensation was very agreeable, he did not know that any operation had been performed and was much pleased on finding that it was over. We need not enlarge upon the great benefit which this discovery has conferred upon mankind. It is self-evident but we may express a wish that the practitioners of this Island will not be long in following the example which has been set them at this naval hospital. We hear that Mr. Wells has promised to give a demonstration of this instrument and its mode of application at the next meeting of the Medical Society of Encouragement in order to bring it more clearly before the Maltese practitioners.'[2]

While this news was being printed 'another operation at the Naval Hospital was performed by Dr. Watt on the same officer involving deep cuts in a very sensitive part of the body which, without the Ether, would have called forth cries of intense agony. The patient was conscious at the time of the operation; heard what was said, saw the knife at the moment the skilful Doctor used it and yet felt not the slightest pain. It is probable that this discovery is only a stepping stone to other discoveries both in Physical and Metaphysical Science. The facts now stated are very suggestive. Credit is due to Mr. Wells, whose superior scientific attainments are well known here, as being the first to introduce to Malta, at rather considerable personal expense, the Ether apparatus.' On the 9th March another operation was carried out under ether 'on a patient with a diseased finger which requires the nail to be extracted; an agonising thing under ordinary circumstances but now a mere bagatelle'.[3]

At a meeting of the 'Società Medica d'Incoraggiamento' (Medical Society of Encouragement) held on the 16th March, Dr. Thomas Spencer Wells, to give him his full name, showed the apparatus used by him for the administration of ether. This apparatus consisted of two glass globes communicating with each other and both containing sponge. In the upper, the ether was formed and gradually dropped through the sponge into the lower bottle from which passed a tube carrying the air charged with ether vapour to the patient's mouth. The end of this tube had a mouthpiece and was furnished with a stop-cock and two valves. One of the valves prevented the air expired from re-entering the inhaler while the other allowed it to escape so that it could not be taken into the lungs again. After the demonstration Dr. Wells addressed the society in Italian and gave a short account of the 'discovery by the Americans and of the most remarkable cases at which it had been tested in England'. He also alluded to the cases in which it had been employed so successfully at the Naval Hospital and elsewhere. He had twice performed the operation for the correction of squinting the day before. A boy of thirteen years, after inhaling the ether for two minutes became perfectly passive and Mr. Wells did the operation and returned the eye to its natural position before the boy moved. He felt no pain 'but remembered seeing the scissors'. The other case was that of a young lady, aged seventeen, a patient of Dr. Adami of Senglea. 'She was nervous about inhaling and her brother was frightened as she became affected. The operation was therefore performed by Mr. Wells while she was only partially insensible. She afterwards said, however, that she had suffered little or no pain although she had retained her consciousness; and was naturally delighted at her improved appearance.' He had observed that weak persons and those worn out by sickness were very speedily affected while strong stout persons and those accustomed to drinking wine and spirits 'had to continue the inhalation much longer, in one case it had to be continued for eight minutes'. He had seen no ill effects in any case in which he had employed it and he was convinced that the accidents that had occurred in England were due to the impurity of the ether, carelessness in the mode of application or some disease in the patient which would have led more prudent men to decline to administer the anaesthetic.[4]

---

[2] *Malta Times*, 9th March 1847, p. 2.

[3] *Ibid.*

At the end of his talk, Mr. Wells invited his colleagues to try the effects of ether inhalation on themselves. Two of them—Dr. F. L. Gravagna and Dr. Luigi Calleja—volunteered to undergo the experiment. The results have been recorded in Italian in the minutes of that meeting and are thus described: 'Dr. F. L. Gravagna, after having inspired the ether for a few minutes, became red in the face, had a fixed stare and felt a tickling sensation in the throat. Dr. L. Calleja also inhaled the ether and his face turned red, the eyes filled with tears and appeared bloodshot, the sense of touch diminished, his head spun round and ached and, for an instant, consciousness was lost. Dr. F. L. Gravagna submitted himself to another trial. He complained of pain in the head, assumed a facial expresion of stupidity and burst out into moderate laughter. Both doctors subsequently suffered from headaches. In the case of Dr. Calleja it was most intense during the first night and lasted for the following two days . . . Dr. Gravagna vomited two hours after the experiment and remained with a headache until noon of the next day.' These manifestations excited so much interest that the President proposed the nomination of a commission to study the effects of ether inhalation on animals and human beings. This suggestion was approved and three members, one of whom was Dr. Wells, were selected to form the commission and to submit their report possibly at the next meeting which was due to take place in a month's time.[5]

---

[4] *Malta Times*, 23rd March 1847, p. 2.

On the 23rd March a British surgeon resident in the Island, Dr. A. J. Burmester, who was a member of the Royal College of Surgeons of England, published an extensive article on ether anaesthesia in a local paper to 'stimulate other members of the Medical Profession in this Island to investigate its merits and apply it to the relief of suffering humanity'. He described his own sensations while under its influence during the extraction of a tooth from his lower jaw by Dr. Wells. 'I can only compare', he states, 'the sensations I felt during the inhalation to those of a person in a pleasant but unconnected dream. A very agreeable state of excitement existed for sometime after, yet at 2.30 p.m. (half an hour after the extraction of the tooth) I rode out to St. Julians and have since felt no ill effects whatever, not even the slightest headache.'[6]

The apparatus used by Dr. Burmester had been 'constructed by Mr. Hooper, a chemist of London under the immediate superintendence of Mr. Robinson who was the first to use it in England'. It consisted of a large glass bottle with a broad round base near which was an aperture for fixing the tube through which the mixed air was to be respired. Through its top this glass bottle communicated by means of a glass tube with a vessel containing sponges. The opening of this receptacle was closed with two stoppers of different sizes and was surmounted by a cup to prevent the evaporation of the ether from the apparatus. The two stoppers regulated the entry of atmospheric air in the container. A flexible tube connected the bottle with the patient and had a very small mouthpiece which was provided with a stop-cock to regulate the quantity of respired air and allow the escape of expired air. A pad fitted tightly round the mouthpiece to prevent the entrance of air into the patient's mouth. The nostrils were compressed for the same reason by means of a spring covered with wash-leather.

Dr. Burmester first started experimenting in January 1847 but his trials were not successful. He ascribed this failure to the quality of ether employed and he, therefore, stressed the importance of using 'pure rectified ether of the least specific gravity and most volatile kind'. In those days the anaesthetist had to prepare the ether himself and the instructions given by Dr. Burmester read as follows: 'Take the strongest and purest rectified sulphuric ether, remove any acid it may contain by washing it with water and, having decanted it from the water, remove any of that fluid that may still remain by means of chloride of calcium.' He invited medical men and 'other scientific persons' to view his apparatus at No. 63 Strada Reale (now Kingsway), Valletta.[7] At the beginning of April a similar invitation was issued by an anonymous person for the exhibition at the offices of the *Malta Times* of a 'very simple and far from expensive apparatus for the inhalation of ether' and for the application 'to those who may be so disposed to try its effects'. By the 6th April a surgeon dentist practising at No. 40 Strada San Zaccaria (now Zachary Street), Valletta, was advertising teeth extraction 'without the least pain by the inhalation of vapour ether'.[8]

---

[5] *Storia della Società Medica d'Incoraggiamento*, Malta, 1845, p. 121.

[6] *Malta Times*, 23rd March 1847, p. 2.

[7] *Ibid.*, 30th March 1847, p. 3.

The reading public in Malta was kept abreast of the developments in the use of ether in London, Vienna and Paris[9] but some of the information was far from reassuring. The insensibility produced by ether was likened to that of drunkenness and asphyxia; warnings sounded in France also reached Malta against 'careless and unprofessional tampering' with ether together with cautionary advice to the medical profession with regard to the manner of its use;[10] while the news originated in Ireland that ether tended to cause tuberculosis of the lungs was quite alarming.[11] Dr. N. Zammit published an account in the local periodical *La Rivista* of the experiments carried out by the Medico-Chirurgical Academy of Turin and counselled 'great prudence' in the use of ether to prevent fatal accidents, of which many had already occurred abroad.[12] All these warnings militated against the rapid acceptance of ether inhalation, with which very few medical men were familiar. It is not to be marvelled at, therefore, if three months after its introduction in Malta patients preferred to 'suffer excruciating pain than take advantage of the most wonderful discovery of the day'.[13]

For reasons that remain unknown, the commission of the Società Medica never set to work and at a meeting of this association held on the 17th March 1849, the secretary informed the gathering that Dr. Wells and another member of the commission were away from Malta; he also raised the question as to whether a fresh commission was needed to study the matter. Dr. Anthony Preziosi favoured such a course and he offered to lend 'a most simple apparatus' which he had constructed for the carrying out of the necessary experiments. Some members, however, were of the opinion that such a commission was no longer necessary as the anaesthetic action of ether had been amply demonstrated during surgical work carried out in Malta; others, on the contrary, having read of the fatalities that occurred abroad during anaesthesia, were not yet favourably inclined to the use of ether. Apart from this concern about the safety of ether, the discovery of a new anaesthetic—chloroform—had been announced. Professor James Young Simpson made known his work on chloroform on the 10th December 1847 and twenty-five days later the *Malta Times* gave the news of 'a therapeutic agent in the place of the inhalation of ether, which we are assured is capable of being introduced with greater rapidity and success into the system . . . The more efficacious agent is chloroform . . . No particular instrument or inhaler is necessary . . . all that is required is to diffuse a little of the liquid upon a hollow shaped sponge or even the pocket handkerchief and apply the same over the mouth and nostrils so as to be fully inhaled.'[14] Members of the association felt that the effects of this new agent deserved to be studied together with those of ether and by a majority of votes a new commission of two members was chosen to carry out the necessary investigations; but again nothing was done as one of the members failed to signify his acceptance of his nomination as prescribed in the statute of the Society.[15]

---

[8] *Malta Times*, 6th April 1847, pp. 3 and 4.

[9] *Ibid.*, 6th April 1847, p. 2; 25th May 1847, p. 3.

[10] *Ibid.*, 23rd February 1847, p. 2.

[11] *Ibid.*, 6th July 1847, p. 3.

[12] *La Rivista*, 1st May 1847, p. 319.

[13] *Malta Times*, 22nd June 1847, p. 3.

Of the pioneers of anaesthesia in Malta, Dr. Thomas Spencer Wells gained renown as the inventor of the forceps that bears his name and as a prominent surgeon and gynaecologist in London. He qualified in 1841 and started his medical career by joining the Navy. He spent six years in Malta as assistant surgeon at the Naval Hospital at Bighi. In 1843 he published two articles on plague and quarantine[16] and in the following year he wrote a report on the cases treated by him at the Naval Hospital during 1843–44 in the *Edinburgh Medical and Surgical Journal* (no. 166). Besides his naval duties, he also engaged in private practice and acquired such a good reputation as a surgeon that he was elected Fellow of the Royal College of Surgeons of England in 1844. On the 28th April 1845 he became a member of the 'Società Medica d'Incoraggiamento'.[17] Two years later he published the clinical history of a case of hydrophobia in a Maltese woman on whom ether inhalation had been unsuccessfully tried in an attempt to abolish the spasms of the muscles of deglutition; and a further paper on quarantine.[18] He departed from Malta in October 1847 when he was appointed to H.M.S. *Hibernia*,[19] and left the Navy in 1848.

Dr. William Couborough Watt, M.D., F.R.C.S., who was the first surgeon to operate on a patient under ether anaesthesia in Malta, was appointed Deputy Inspector of the Royal Naval Hospital of Bighi on the 25th March 1843. He had distinguished himself in the Burmese War in 1825 as Chief Naval Medical Officer. In June 1842 he was admitted honorary member of the 'Società Medica'. He died on the 20th August 1848 at his residence in Rinella Bay, after serving with credit for over thirty years in the Royal Navy, and was buried at Bighi Cemetery. He was the last survivor of a numerous family and his belongings, including his surgical instruments, gold watch and chain, were sold by public auction.[20]

Dr. A. J. Burmester was a member of the Royal College of Surgeons of England and a Fellow of the Royal Medical and Chirurgical Society of London. He was formerly a House Surgeon to St. Bartholomew's Hospital and to the General Lying-in Hospital of London. He was in civilian medical practice in Valletta where he held 'consultations in all cases connected with medicine, surgery, ophthalmic surgery and midwifery'.[21] He was passionately fond of 'athletics and gymnastic exercises —and equally so of the practice of the small sword and pistol firing'.[22] It was through this last hobby that he met an untimely death in tragic circumstances fourteen months after his first experiments with ether inhalation, having accidentally shot himself on the 29th May 1848. His death is thus recorded in a Maltese paper: 'It appears that he dined on board one of H.M.'s steamers and afterwards went for a ride. He spent the evening with some of his friends by two of whom he was accompanied home about half past eleven. They remained with him until half past four. Dr. Burmester then began to fire at a mark in his own room as he was often in the habit of doing with hair triggered pistols. After having fired about twenty rounds he told his servant he might go to bed. The man had scarcely left the room when the pistol which the Doctor was holding went off and the bullet entered the upper region of the heart; death was almost instantaneous.'[23] He was buried in the Floriana Cemetery.

---

[14] *Malta Times*, 4th January 1848, p. 2.

[15] *Storia della Società* . . ., pp. 260 and 265.

[16] *Malta Times*, 20th July 1847, p. 2.

[17] *Storia della Società* . . ., p. xvi.

[18] *Malta Times*, 15th June 1847, p. 3; 20th July 1847, p. 2; 24th August 1847, p. 3.

[19] *Ibid.*, 12th October 1847, p. 3.

[20] *Ibid.*, 22nd August 1848, p. 3; 9th January 1849, p. 3. *The Malta Mail*, 25th August 1848, p. 2.

It is not known what further developments occurred during those early years of anaesthesia but it is certain that by 1864 chloroform inhalation had become firmly established in Malta. In the military hospital, two surgeons were in charge of the anaesthetised patient—one to administer the chloroform and the other to take care of the patient's pulse.[24] When in February 1882 a nursing school was opened at the Central Hospital, the 'preparation of patients for chloroform' and the tendering of assistance 'in cases of impending death from chloroform' were included in the syllabus of studies.[25] The first laparotomies to be carried out at the Central Hospital were performed under chloroform, which remained the anaesthetic of choice till the beginning of the present century, when it was replaced by a mixture of ether and chloroform.[26] It was given by the open method but by 1922 it was administered by the Vernon Harcourt Inhaler, which had been in use in military hospitals in Malta during the First World War. An apparatus for ether inhalation was also available at the Central Hospital by 1910 but it was rarely used. Nitrous oxide was given only in minor surgical procedures such as opening of abscesses and teeth extraction.

---

[21] *Muir's Almanack for 1847*, Malta, no pagination.

[22] *The Malta Mail*, 2nd June 1848, p. 2.

[23] *Malta Times*, 30th May 1848, p. 3.

[24] Bernard, L., *Sull'utilità e necessità della chirurgia*, Malta, 1866, pp. 9, 15 and 18.

[25] New Organisation of the Central Hospital, 1867, fol. 67, Medical and Health Archives, Valletta.

[26] *Rivista Medica*, 1891, ii. p. 1.

Anaesthesia was administered by one or other of the four Resident Medical Officers of the hospital until the end of the First World War, when the post of anaesthetist was created on the recommendation of the eminent surgeon Col. Sir Charles Ballance and other British consultant surgeons who were in Malta at the time.[27] The first to fill the post was Dr. Emmanuel Vella (1885–1925) who was appointed on the 20th June 1919.[28] During the war he saw service in the military hospitals of Malta and was anaesthetist to Sir Charles Ballance.[29] According to the terms of his appointment he was required to give, occasionally, 'a voluntary course of theoretical and practical instruction in the administration of anaesthetics to graduates'.[30] On the 22nd May 1922 he was succeeded by Dr. George Busuttil, who since June 1915 had been a Civilian Surgeon attached to the Royal Army Medical Corps and anaesthetist to the Cottonera and Mtarfa Military Hospitals.[31] It was at this time that ether definitely replaced chloroform at the Central Hospital and that Boyle's apparatus for nitrous oxide anaesthesia was introduced.

Regular lectures and practical work in anaesthesia for senior medical students were first started at the university in 1928.[32]

---

[27] Busuttil, G., personal communication, 1st February 1960.

[28] *Malta Blue Book 1919–1920*, p. H46.

[29] *The Daily Malta Chronicle*, 13th February 1925, p. 12.

[30] *Malta Government Gazette*, 9th May 1919, p. 372.

[31] *Malta Government Gazette*, 16th June 1922, p. 405.

[32] *The Royal University Calendar 1939–40*, Malta, 1939, p. 65. *Malta Government Gazette*, 13th April 1928, p. 268.

PART X

THE IMPACT OF WAR

CHAPTER 53

The First World War

THE century of peace enjoyed by the Maltese Islands following their entry into the British family of nations came to an end with the outbreak of the First World War. The early phases of the conflict gave no indication that Malta was destined to be called upon to resume her hospitaller role until the beginning of 1915, when Turkey joined the Central Powers and it became necessary for the Allies to attack the Gallipoli peninsula and the Dardanelles.[1] From then onwards, it has been rightly said, the provision and organisation of the hospital services of the Island became one of the remarkable achievements of the war.[2] In March an appeal was issued by the Governor asking the inhabitants to take some of the sick and wounded into their own homes. Barracks and many public and private buildings were turned into hospitals.[3]

The first convoy of casualties—one thousand two hundred of them—reached Malta on the 4th May 1915. 'What a moving procession of pain passed through our streets to-day!' wrote an eye-witness. 'At noon a convoy of six horse-ambulances slowly wended its way through Strada Reale (Valletta). Even the horses seemed conscious of their sad task! People threw cigarettes and chocolates into the ambulances to give expression to their admiration for the brave men . . . The aspect of the crowd was reverential . . . Some (of the convalescents) were barefooted, others tattered and torn.'[4] By the end of the month of May four thousand men had been received, a figure which rose to ten thousand in September and twenty thousand in March of the following year.[5] Plans were drawn up to increase the number of beds to twenty-five thousand. By mid-1916 twenty-seven hospitals and camps were in operation. After the evacuation of Gallipoli the number of admissions to hospitals fell to three thousand in May 1916, but it rose again to over twenty thousand in October, the increase being mainly due to the large incidence of malaria among the troops from Salonika. With the intensification of the submarine war many ships were sunk in the Mediterranean, and most of the patients

[1] Laferla, A. V., *British Malta*, vol. ii, Malta, 1947, p. 200.
[2] Mackinnon, A. G., *Malta the Nurse of the Mediterranean*, London, 1916, p. 149.
[3] Laferla, A. V., 'Pages from my Diary', *Melita*, 1925, v. 115
[4] *Ibid.*, p. 115.
[5] Laferla, A. V., *British Malta*, vol. ii, p. 202.

admitted to hospitals in Malta between 1916 and 1917 were rescued sailors suffering from shock and exposure.

Three hundred medical officers, among whom were a number of lady doctors, were distributed in the various hospitals in the summer of 1915 and almost one thousand nurses, half of whom were only partly trained (V.A.D.s), laboured incessantly to cope with the rush of casualties. Among the famous British consultants that worked in Malta were Col. Charles Ballance, surgeon to St. Thomas's Hospital; Col. C. Symonds, surgeon to Guy's Hospital; Col. J. Purves Stewart, physician to Westminster Hospital; and Col. A. Garrod, physician to St. Bartholomew's Hospital.

The principal hospital was the Valletta Military Hospital, previously the Holy Infirmary of the Knights of St. John. As it was situated very near the harbour it was within easy reach of the casualties as they were brought in by the hospital ships. For this reason it was used as a sorting base and also as a station for dangerously ill cases which it was inadvisable to move any further. As many as two hundred beds were contained in the Great Ward alone.

From the Valletta Military Hospital patients were distributed to other hospitals and camps, the main ones being: The Cottonera Hospital, commanding a picturesque view of the harbour environs and of Valletta; Bighi Hospital, for naval personnel; Floriana Hospital; Hamrun Hospital (The Technical Institute), for eye cases; Mtarfa Hospital, capable of accommodating one thousand two hundred patients and used mainly for infectious and enteric cases; St. Andrew's Hospital, the second largest in size, for convalescent men destined to return to combat duties; St. George's Hospital; St. Paul's Hospital, consisting of wooden huts built near St. Andrew's and St. George's Hospitals; St. David's and St. Patrick's Hospitals, both of which were tent hospitals erected in the Spinola area; St. John's Hospital, set up in the newly built Government Elementary School at Sliema; St. Ignatius Hospital, established in the Jesuit College of the same name at St. Julian's Bay; Forrest House, also at St. Julian's, set up in Villa Spinola; Tigne Hospital at Sliema; St. Elmo and the Baviere Hospitals, both in Valletta; Manoel Hospital, for infectious cases; Ghajn Tuffieha Hospital, consisting of four camps for four thousand men; and the Blue Sisters Hospital, run for officers by the nuns of the Little Company of Mary.

From the various hospitals, patients were transferred to convalescent camps and thence to regrouping units from where they went back to the front. Recreation tents and rooms for wounded men were provided by various religious organisations and by the British Red Cross and Order of St. John. Emergency hospitals began to close down after the influx of the sick and wounded started to decline towards the month of May 1917.

The people of Malta did their level best for the wounded and the sick, Maltese women joined the hospitals as nurses. Theatre entertainments, garden parties and tea-rooms were organised by Maltese ladies. Nurses of the Malta Branch of the St. John Ambulance Brigade served in the military hospitals; school-children helped by rolling bandages and preparing swabs; Boy Scouts ran errands for the patients. In an address at the opening of the session of the Council of Government on the 10th December 1917 His Excellency the Governor declared: 'I also desire to record my grateful recognition of the sympathetic hospitality which the people of Malta and Gozo have extended to the sick and wounded that have been brought here during the war, of the support that they have given to the British Red Cross and Order of St. John of Jerusalem and the other Charitable Committees that have been formed.'[6] Even the proverbially sonorous church bells of Malta restrained their pealing at the behest of their Archbishop not to disturb the wounded men who came to Malta in search of peace and rest.[7] It is noteworthy that there was only one other instance in the story of the bells of Malta when they had remained silent. That was during the insurrection of the Maltese against the French in 1798 when the ringing of bells in Valletta was forbidden by the French for fear that they might be used as a signal for a revolt of the townspeople against their Republican masters.[8]

This was not the first time that Malta had been called upon to assume the role of nurse during wartime and it was said that Malta added 'a bright chapter to human history and with reverence will its hospitals ever be named; for there sacrifice has once more been enthroned and unselfishness, garbed in nurse's cape or surgeon's uniform, proclaimed the triumph of love'.[9]

[6] *Malta Government Gazette*, 10th December 1917, p. 897.

[7] Mackinnon, A. G., *op. cit.*, p. 41.

[8] De Boisgelin, L., *Ancient and Modern Malta*, London, 1805, p. 148.

[9] Mackinnon, A. G., *op. cit.*, pp. 13 and 259.

CHAPTER 54

The Second World War

In conjunction with Great Britain, Malta entered the Second World War on the 3rd September 1939. The first six months passed more or less uneventfully, but when Italy entered the war in June 1940 the Maltese Islands found themselves flanked by hostile forces on every side. Italy was only sixty miles away—about twenty minutes' flying time by bomber plane—while they were well within the bombing range of the Italian Island of Pantelleria and the Axis air bases in North Africa.

CASUALTIES

Italy declared war on the 10th June 1940 and early next morning Malta had its first air bombardment. Eight air raids were registered on that day but bombing by the Italian planes was never severe so that by the end of 1940 there had been only 209 civilian casualties with ninety-four deaths. The civilian population of the Maltese Islands was estimated at just over 270,000 (241,000 in Malta and 29,000 in Gozo) representing a density of 2,545 persons per square mile in Malta and 1,086 in Gozo.[1] A more critical phase began with the dawning of 1941. In January the German air force came to Sicily and henceforth the battle of Malta waxed and waned with the varying fortunes of the North African and Russian campaigns. The Germans appeared bent on an intensive attack on Malta and for the next five months they battered the towns of the Island by day and by night almost beyond recognition. In this ruthless offensive hundreds of houses were razed to the ground and the three cities of the Cottonera area were almost totally destroyed. The number of civilians killed during the year was 289 of whom sixty-six were women and sixty-seven children under sixteen years of age.[2] The Germans disappeared from the sky over Malta in June 1941, when the Italians again took over until the return of the Luftwaffe towards the end of the year. From December 1941 to July 1942 air attacks over the whole Island continued day after day right through the night, while on some days alerts persisted without respite 'very nearly twice round the face of the clock'. These bombardments were more intense than any that had been experienced, their ferocity reaching a climax in April.

---

[1] *Report on the Health Conditions of the Maltese Islands for 1940*, pp. vi, vii, x and xxvii.

[2] *Report . . . for 1941*, pp. i and vi.

By December 1942 the number of civilians killed during the year soared to 1,092.[3] Air activity slowed down markedly in 1943 so that the number of casualties dropped to 101 with twenty-seven deaths. There were only four war deaths in 1944—all children killed while tampering with a mine that was washed ashore. The total number of civilian casualties from the 11th June 1940 to the 31st December 1944 was: 3,780 injured (1,846 seriously), 1,190 killed outright, 300 died of wounds and fifty-four missing, presumed dead (total deaths 1,544). This means that one person in every two hundred of the population was killed.[4]

Provision for the payment of allowances and pensions to persons injured or killed through the operations of war and to their dependants was made in August 1941 by the 'Personal Injuries (Civilians) Scheme'.

PSYCHOLOGICAL REACTIONS OF CIVILIANS

Owing to the small area of the Maltese Islands there was hardly any demarcation line, as far as exposure to hazards of warfare was concerned, between servicemen and civilians. Indeed every home and every man, woman and child was in the front line of battle as they were equally exposed to the risks of aerial bombardment, though the probability of bombs falling on some of the inhabited areas, such as villages away from military objectives, was decidedly less than in the case of towns situated around the harbour. Mass evacuation of civilians was out of the question though there was a considerable dispersal of the population. Many of the inhabitants of the bombed areas took refuge in the crypts of churches, basements of schools and the disused railway tunnel of Valletta. Others left the destroyed cities and towns for the villages where they found accommodation with relatives and friends; some even occupied the natural caves that are to be found scattered in the countryside. Private and communal shelters were dug underground in many localities and also in the face of the rocky foundations of the old fortifications of Valletta and the three cities of Senglea, Bormla and Birgu. About three thousand persons are estimated to have taken refuge in the neighbouring Island of Gozo during 1940.[5]

At the onset of the air attacks the civilian population was afraid and perplexed because of the novelty and destructive power of aerial warfare and because of the inadequate protection against bombing. These initial reactions gave place to a more realistic attitude as the people observed that the effects of Italian bombing became less severe after a time. Fear became tempered by anger and hate and, later on, by defiance and curiosity. The last reaction predominated when air raids were accepted as an inevitable part of everyday life and as the people resigned themselves to the prospect of a long struggle and as more adequate protection against air raids was made available; so much so that there were occasions when people preferred to risk their lives to watch the progress of air battles than take shelter, in spite of repeated warnings from the civil and military authorities.

---

[3] *Report . . . for 1942*, p. ii.

[4] *Report . . . for 1943*, p. ii; *Report . . . for 1944*, pp. viii and xviii. *Malta Review*, 15th December 1944, p. 1.

[5] *Report . . . for 1940*, p. vii.

A definitely more cautious and prudent attitude developed with the onset of German bombing. Though the Luftwaffe was more ruthless than the Italian air force, the people's hostility during the German onslaught was directed more against the Italians than against the Germans. Gradually the population became hardened also to the German menace and eventually adjusted itself to this more dangerous way of living. In some people the realisation of an ever present peril engendered an attitude of indifference sometimes amounting to recklessness as to what could happen on the morrow and they lived only for the day. Quite a large number of the inhabitants showed an amazing attachment to what remained of their damaged homes and even when no traces survived of their residences or their streets, they stubbornly refused to abandon their native town or village and preferred to live uncomfortably in a communal shelter rather than accept accommodation in another area.

Before the opening of hostilities it was anticipated that the people would react to the horror and havoc of modern warfare in an exaggerated and abnormal manner. It was consequently forecast that the number of psychiatric casualties would be high and beds for cases of 'war neuroses and psychoses' were prepared in special wards at the Mental Hospital at Attard.[6] Subsequent experience, however, showed that this precaution was unnecessary because the factors that were regarded as being precipitants of mental illness did not produce the expected baneful effects on the population. Indeed anxiety for one's personal safety, sudden bereavements, the disruption of family life and the presence of material discomforts and food privation did not react unfavourably on the mental health of the population. Panic and hysteria were absent.[7] A most remarkable feature was the fact that admissions to the mental hospital fell to 138 in 1942 from the pre-war figure of 169 in 1939.[8] To appreciate the significance of this decline it must be realised that 1942 was the third—and the worst—year of the war; yet in spite of the incessant bombing, the near-starvation rations and the impossibility of nursing mental cases at home, admissions to the mental hospital were the lowest in thirty years.[9] With the easement of war conditions in 1943, the admission rate began to rise. It reached 250 in 1945, the highest figure recorded since 1861 when the hospital was first opened,[10] returning to the expected level in proportion to the natural increase of the population in the following years.

---

[6] *Report* . . . for 1940, p. lxxiii.

[7] *Ibid.*, p. lxxiii.

[8] *Ibid.,*. p. lxxii; *Report . . . for 1942*, p. xii.

[9] *Report . . . for 1944*, p. xlvii.

[10] *Report . . . for 1945*, p. lxxxvi.

THE EMERGENCY MEDICAL SERVICE

A scheme for the establishment of an Emergency Medical Service and the piling of a substantial reserve of medicinal stores was prepared as early as 1935[11] during the Italo–Abyssinian conflict, so that when the Second World War broke out in September 1939, the Medical and Health Department was ready to provide from 1,200 to 1,500 beds for war casualties as well as first aid and decontamination centres. To disseminate knowledge among civilians with regard to the surgical and chemical aspects of modern warfare, booklets dealing with air-raid precautions, with the preparation of gas-protected rooms, with the first-aid treatment of injuries and with the methods of defence against chemical agents were published and distributed.[12] The possibility of an invasion of the Island had also been kept in mind. To deal with the casualties in such an event special arrangements were made by which, in case of disruption of communications, each town or village was to have a self-sufficient medical and sanitary service. Apart from the hospitals already in existence others were prepared at Mellieha, Zurrieq and Zejtun while refugee hostels in other areas were to be used for the treatment of the sick and wounded and for maternity cases. Special burial grounds were also in readiness in each area.[13]

On Italy's entry into the war the Emergency Medical Service was mobilised and started functioning early the following morning when the first air-raid casualties occurred.[14] A section of the Central Hospital at Floriana, which was then the only general hospital in the Island, was turned into a casualty hospital. Emergency wards were established at the St. Vincent de Paul Hospital and other places for the care of the aged and chronic sick who could not be looked after at home on account of the disruption of family life. The St. Vincent de Paul Hospital did not function for very long because owing to its proximity to Luqa airfield it had to be completely evacuated early in 1941 and its inmates dispersed in several impoverished institutions. It was subsequently taken over by the Royal Air Force and did not reopen as a hospital until 1944.[15] The basement of St. Luke's Hospital—which was still under construction—was adopted as an isolation and fever hospital for cases that had to be evacuated from the Isolation Hospital at Manoel Island at the beginning of June. Santo Spirito Hospital at Rabat was converted into a clearing station for casualties from that district.

Colleges, schools, orphanages and convents were turned into temporary hospitals, X-ray equipment and other appliances were contributed by the British Red Cross and Order of St. John War Organisation.[16] Bugeja's Technical School at Hamrun was equipped with 150 beds as early as September 1939; part of the Blue Sisters Hospital, the Sacred Heart Convent at St. Julian's and the Mater Boni Consilii School at Pawla were also adapted as hospitals. The Pawla hospital was open only for a fortnight, for it had to be closed down when it became unsafe owing to its proximity to the Dockyard, which was made the target of repeated bombing. The patients were transferred to St. Aloysius College at Birkirkara which was equipped as a hospital for men suffering from medical and surgical ailments. A maternity hospital to cater for one hundred patients was set up in June 1940 at the Adelaide Cini Orphanage in Hamrun. A rock shelter was constructed by the end of 1941 to house practically all the patients. It was equipped with an underground Operating Theatre and Labour Wards with running water and electricity. Maternity cubicles were also established in rock shelters in many villages for expectant mothers who were unwilling to go to hospital. This plan worked very satisfactorily and no cases of sepsis occurred.[17]

---

[11] *Report . . . for 1942*, p. i.

[12] Bernard, A. V., *Lectures on Medical Aspects of Chemical Warfare*, Malta, 1935. *Air Raid Precautions Circular No. 1*, Malta, 1939. Galea, G., *L'ewwel għajnuna lil min ikorri fi żmien il gwerra*, Malta, 1940.

[13] *Report . . . for 1941*, p. xviii.

[14] *Report . . . for 1940*, p. ii.

[15] *Report . . . for 1941*, p. ii; *Report . . . for 1944*, p. xx.

All the hospitals were hit and damaged by aerial bombardment at one time or another. St. Bartholomew's and the Central Hospital were extensively damaged in February and in May 1941 respectively, so that the Central had to be temporarily evacuated. In April casualties occurred at the Mental Hospital when a patient was killed, another fatally wounded and eight seriously injured. Bugeja Hospital was hit in September 1941 while incendiary and explosive bombs fell in the courtyard and grounds of Cini Hospital. Bombs fell close in the vicinity of the Blue Sisters Hospital causing damage to glass and woodwork, while others were dropped on Santo Spirito Hospital and the Connaught Hospital for tuberculosis. More damage was caused to St. Bartholomew's Hospital and the Central Hospital during the heavy bombing of 1942. St. Luke's Hospital, which was hit on the first day of the war with Italy when it was still unoccupied, sustained serious damage and casualties in April of this year. The fever cases were transferred to a new emergency hospital set up in May in the Government School at Birkirkara and named after St. Francis. The Mental Hospital was again damaged on two separate occasions in 1942; in the first instance four male patients were killed, and on the second occasion a Sister of Charity and two female hospital attendants lost their lives while conveying patients to the underground shelters. The Cini Maternity Hospital was hit a second time in February 1942 when the sleeping quarters of the nursing staff were destroyed. The Head Office of the Medical and Health Department in Valletta was damaged in 1941 while many District Dispensaries were hit and some completely destroyed.[18] In spite of these temporary setbacks in the work of medical institutions, the hospital services were never interrupted. All casualties were taken in hand immediately on reaching hospital and effectively treated. The most common lesions were wounds of muscles and injuries of bones and joints due to falling masonry, bomb splinters and blast. The mortality was nearly 13 per cent of total persons treated or 15 per cent of serious cases.

---

[16] *Report . . . for 1943*, pp. iv and xii; *Report . . . for 1944*, p. xviii.

[17] *Report . . . for 1941*, p. ii; *Report . . . for 1940*, pp. ii, iv, xi and xxv.

[18] *Report . . . for 1941*, pp. iii, xvii, xix, xx and xxi; *Report . . . for 1942*, pp. v, ix, x and xi.

The exertions of the professional and lay staff of the Emergency Medical Service earned them public commendation, not only of the Chief Government Medical Officer but also of the two war governors, Sir William Dobbie and Lord Gort, 'for the fortitude with which difficulties were faced and surmounted under the arduous conditions of bombing and siege' and for 'the steadfastness and endurance shown by the personnel of those hospitals and districts that suffered the greater devastation. Many of them lived and worked under conditions of severe hardship and danger and carried on without flinching or murmuring.'[19]

FOOD

The devastation wrought by bombing, the mounting of casualties and spread of diseases constituted only a part of the Island's ordeal. In fact, besides these tribulations, Malta had to face the more formidable problem of obtaining food. Although the supplying of the Island became an extremely dangerous proposition immediately Italy entered the war, it assumed graver proportions as hostilities dragged on; so much so that the main preoccupation became not so much the dodging of falling bombs as the more pressing one of maintaining life on the Island.

The Maltese archipelago has never been self-supporting. Its agricultural produce supports the population for only about three months of the year; the rest of the foodstuffs must be imported and all supplies have to reach the Island by sea. All ships had to pass through the narrow waters between Sicily and Tunisia, thus exposing themselves to Italian and German aircraft, mines and submarines. At first ships came in at intervals of weeks and months but some of them were sunk in the harbour before the greater part of their cargo could be unloaded. The food situation started to deteriorate during the period of tight blockade (October 1941–November 1942), becoming desperate early in 1942. In May bread was rationed at the rate of 10½ ounces per head, i.e. one third of the normal peacetime consumption, while fresh meat, eggs, milk and butter were unobtainable for a considerable time. In June the people were told that they were to make their food stores last until 'Target Date' but as time progressed 'Target Date' became more and more remote. Indeed food rations were cut down to such an extent that the calorie value of the diet became dangerously low.

---

[19] *Report ... for 1942*, p. iii; *Report ... for 1943*, p. v.

The goats were killed for their meat. With the extermination of these animals, which were the only source of fresh milk in the Island, milk practically disappeared. Some hopes were built on the tomato crop in August but this lasted for only fifteen days. The situation was temporarily relieved by the arrival of a few merchantmen that brought in flour, but the spectre of starvation again raised its head when rations were cut down to a mere subsistence level. Thousands of persons were almost wholly dependent for their food upon the government communal kitchens, known as Victory Kitchens, which had originally been devised to supplement the meagre rations. Only one meal a day was available consisting of a plate of thin soup with a few beans and a piece of tinned fish or an ounce of corned beef. Sometimes a slice of goat or horse-flesh was to be had. There were no potatoes. Powdered milk was reserved for nursing mothers and babies. These conditions gave rise to the growth of a 'black market' where some food items fetched extremely high prices; thus eggs were sold at two shillings and sixpence each, bread at five shillings a *rotolo* (about two lb.) and meat at fifteen shillings or more a *rotolo*. In many homes the bread ration was jealously guarded by the womenfolk, sometimes under lock and key, to be shared out among the household at fixed times in order to make it last as long as possible. This ordeal by hunger was a most exacting sacrifice and only those who experienced it can appreciate the amount of fortitude needed to withstand it.

The deficiency of vitamins in the diet gave rise to outbreaks of ulcerative stomatitis, pellagra, ariboflavinosis and a few cases of rickets and scurvy.[20] Pellagra was especially rife among mental patients, it being responsible for the majority of deaths among the inmates of the Hospital for Mental Diseases where the mortality rose from the pre-war 5 per cent to 26 per cent during 1942. It declined to 8 per cent in 1943 but 40 per cent of deaths were still due to pellagra. There was only one death from this disease in the following year.[21]

The state of strict blockade and extreme privation lasted until November 1942 when a few ships entered harbour unmolested. By this time only thirteen days of siege rations were available. As more convoys got through to the Island after the German retreat in North Africa, an easement in the food situation took place early in 1943. This was followed by a quick improvement in general health conditions and by a rapid drop in mortality. Rations were increased to adequate levels as more food supplies reached the Island but fresh meat became available only in the later periods of the year. The rearing of goats resulted in an increased production of milk so that by July 1943 pasteurisation was resumed by the government plant. The food position attained a satisfactory balance by the end of 1944 but concurrently with this dietetic return to normality the incidence of metabolic disorders, such as diabetes, which had greatly diminished during the years of privation, again returned to pre-war levels.[22]

---

[20] *Report . . . for 1942*, p. i.

[21] *Report . . . for 1939*, p. lxxvi; *Report . . . for 1943*, p. xxxviii; *Report . . . for 1944*, p. xlvii.

COMMUNICABLE DISEASES

With the destruction of thousands of houses and with the increased frequency of air raids during the night, the shelters that initially gave temporary refuge during bombing attacks became residential quarters for 'the duration' for the thousands of persons who were rendered homeless. This influx of people in permanent underground living quarters created a serious threat to the public health which was, however, effectively dealt with. All practical measures to safeguard the health of shelterers were taken without delay. Ablution rooms and sheds for the washing of clothes were provided; water-closets connected with the sewers replaced the earlier arrangements for the disposal of excreta by the pail system; wooden bunks were constructed to afford adequate sleeping accommodation and insecticides were sprayed on walls, floors and beds. From the outset health officers, sanitary inspectors and District Medical Officers inspected and controlled the sanitary conditions of shelters and refugee centres while, to ensure observance of personal hygiene, regulations were enacted in July 1941 to provide for the cleansing of filthy and verminous persons and their belongings.

A serious sanitary problem was the disposal of human excreta and house refuse. The sewers were considerably damaged by bombing and house drains were put out of action. Scarcity of transport resulted in fouling of roadways and open spaces in those areas unprovided with water-carriage sewers while scavenging of the streets suffered from the same cause. The collection and disposal of house refuse remained unsatisfactory due to lack of motor vans until 1946.[23]

The public water system was disrupted in places. The supply to Valletta and the three cities was dislocated in 1941 with considerable losses of water due to burst pipes and destruction of service tanks. Anxiety was felt regarding the quantity of water for the summer months but a press campaign for the voluntary reduction in water consumption tided the inhabitants over this critical period. The precaution was taken to chlorinate private house tanks to ensure freedom from contamination in case these waters had to be used in the event of a failure of the piped supply. Interruption of the water system was frequent during 1942 and in some places water had to be carried and distributed in water-carts until the mains were repaired. Towards the end of the war steps were taken to increase the water provision of Malta by the boring of wells and galleries but the need to supplement this yield was still felt and water had to be imported by tankers from Augusta in Sicily in 1944.[24]

[22] *Report . . . for 1942*, p. ii; *Report . . . for 1943*, pp. i and xi; *Report . . . for 1944*, p. xv; *Report . . . for 1945*, p. lxxvi.

[23] *Report . . . for 1942*, p. ix; *Report . . . for 1945*, p. xvi; *Report . . . for 1946*, p. xiii.

[24] *Report . . . for 1941*, p. xxxiv; *Report . . . for 1942*, pp. ix and xviii; *Report . . . for 1943*, p. x; *Report . . . for 1944*, pp. xv and xxvii.

The incidence and spread of communicable diseases must be viewed against the background just described. No outbreaks of major infectious illnesses occurred in the early part of the war so that, with the exception of tuberculosis and whooping cough, the mortality from communicable diseases during 1940 did not exceed that of previous years but was, in some instances, even below the average. This was notably so in the case of undulant fever, puerperal sepsis, cerebrospinal fever and diphtheria. On the other hand the deterioration of habits of personal cleanliness due to lack of washing facilities was responsible for an abnormal rise in the incidence of scabies, pediculosis and trachoma in 1941. Scabies, complicated by sepsis of the skin, was widespread not only among shelterers but also among the general population. It proved very difficult to control in spite of insistence on treatment and on hospitalisation of whole families. When supplies of benzyl benzoate became available, a scabies clinic was set up in St. Luke's Hospital in January 1944 where over five thousand seven hundred persons were successfully treated during the year; an average of twenty cases a week were still being treated at the clinic in 1945.[25]

Tuberculosis—pulmonary, abdominal and meningeal—spread unchecked, reaching a climax in 1942 as overcrowding and food shortages attained their peak periods. It began to decline to pre-war levels in 1943, the improvement continuing throughout the following years.[26] Typhoid, too, was on the increase during the first two years of the war, breaking out in epidemic proportions in the summer of 1942, at first through the escape of sewage on to cultivated land from sewers damaged by bombing, and later on through the irrigation of fields in certain areas with crude sewage. This release of human excrement on the soil coincided also with an increased incidence of bacillary and amoebic dysentery. These infections abated when autumn approached and when sewage irrigation was suspended. A serious outbreak of typhoid occurred towards the end of July 1943. It was caused by the accidental contamination of a water reservoir by sewage which infiltrated into the water system from a sewer passing underneath Tal Qali aerodrome. This airfield had been subjected to intensive bombing and the sewer became blocked by debris, the overflow of its contents percolating into the nearby reservoir through fissures in the earth. Although the contamination was detected early and the reservoir promptly sealed, the expected epidemic became manifest by the end of the first week in August. It was mainly limited to the areas served by the polluted supply but it dragged on till the end of the year by the occurrence of secondary cases. Compulsory inoculation of the population was first resorted to in February 1944. The total number of cases reported was 1,566 with 202 deaths.[27]

---

[25] *Report . . . for 1940*, pp. i, xii, xviii and xix; *Report . . . for 1941*, p. xii; *Report . . . for 1942*, p. i; *Report . . . for 1944*, pp. xi and xix; *Report . . . for 1945*, p. xxiii.

[26] *Report . . . for 1943*, p. i; *Report . . . for 1944*, pp. iii and x.

[27] *Report . . . for 1942*, pp. i and v; *Report . . . for 1943*, pp. ii, viii, x and xxi; *Report . . . for 1944*, p. xvii.

The year 1942 closed with an explosive epidemic of acute anterior poliomyelitis in November which did not cease until the beginning of June of the following year. Four hundred and thirty persons suffered from the disease of whom seventeen lost their lives. A smaller outbreak started three years later in November 1945 and spent itself towards the end of April 1946. The great majority of those affected were children below five years of age.[28]

Rats found safe harbourage and convenient breeding places among the debris and fallen masonry in the devastated areas. Through the intensive anti-rat campaign conducted by the sanitary authorities thousands of these animals were exterminated. Fleas were also abundant and anxiety was felt over the possibility of some widespread epidemic due to these vectors; in fact, the anti-rat campaign did not succeed in averting the occurrence of murine typhus. The first case appeared in October 1944, the disease becoming epidemic throughout the following year. One hundred and ninety-nine cases with eight deaths are known to have occurred by the end of 1945. Bubonic plague was introduced in Malta in June 1945, probably by means of plague infected rats coming ashore from landing craft and starting an epizootic among the local rat population. The epidemic came to an end in June of the following year after affecting eighty persons and killing twenty-two of them.[29]

The position with regard to puerperal sepsis, cerebrospinal fever, undulant fever and diphtheria remained satisfactory during all the war years. Due to the slaughtering of large numbers of goats and to the resumption of milk pasteurisation in July 1943, undulant fever showed its lowest incidence ever, while, thanks to the inoculation of thousands of children against diphtheria in 1942–43, the mortality from this disease was the lowest recorded for the previous nineteen years.[30]

POPULATION TRENDS

Before the outbreak of war there was a steady increase in the population of the Maltese Islands, but by 1940 it began to slow down. In 1939 the rate of natural increment was 13 per thousand; in 1940 it fell to 9·8 and in 1941 to 3·3. This diminished natality was due to the disturbance of family life and to the absence of privacy attendant on communal living in shelters and refugee centres. The birth rate began to rise rapidly in 1943 with the waning of air bombardments, a substantial increase in the population being registered by 1944, which neutralised the setback suffered during the worst period of the war. Apart from a more prolific natality, this increment was also partly due to a concurrent reduction in the general death rate especially in the case of babies, the infant mortality dropping sharply from 345 per thousand live births in 1942 to 210 in 1943 and 116 in 1944.[31]

---

[28] *Report . . . for 1942*, p. i; *Report . . . for 1943*, pp. x and xi; *Report . . . for 1945*, p. li.

[29] *Report . . . for 1941*, p. xiii; *Report . . . for 1943*, pp. ii, x and xxiv; *Report . . . for 1944*, p. xix; *Report for 1945*, pp. ii, xii, xxx and lxv.

[30] *Report . . . for 1943*, pp. ii, viii and x.

---

[31] *Report . . . for 1941*, pp. ii and iv; *Report . . . for 1942*, pp. i, ii, v and vi; *Report . . . for 1943*, pp. i, vii and viii; *Report . . . for 1944*, pp. iii and vi.

FINIS

LAUS DEO

Name Index

Abela, G. F., 24, 91, 160, 171, 172, 175, 503, 507
Abenazia, Joseph, 14
Abraham, *physician*, 13
Adami, *Dr.*, 546
Adams, A. L., 503
Adelaide, *Queen*, 218
Agius, E., 263
Agius, *Dr.* Giovanni, 146, 159, 274
Agius, Mariano, *apothecary*, 35
Agius, P. P., 266, 282, 315, 324, 524
Agius, T., 263
Agius Ferrante, T. J., 265
Alcock, *Major* W. Broughton, 189
Aldieri, C., 535
Alexander VII, *Pope*, 96
Alfonso V, *King of Aragon*, 24, 285, 384
Alfort, Michele, *apothecary*, 28
Allemagna, *Admiral* Domenico d', 44
Almirante, Pasquale, 514
Alpheran, *Bishop* Paolo, 91
Alphonse V, *King*, see Alfonso
Amboyse, *Grandmaster* E. d', 273
Amic (Amy), d', 146, 147, 148, 149
Amy, *see* Amic, d'
Anderson, A., 235, 356
Anderson, William, 252
Andreotti, Giovanni, 444
Angas, George French, 294, 504
Anne, *St.*, 30
Anthide, *Sister* Joan, 406
Aquilina, *Dr.* G. G., 505, 540
Armenia, Luca d', 18
Arpa, *Prof.* Saverio, 451, 529
Arrigo, *Dr.* A., 258
Attard, Joseph, 186
Austin, *Sir* John, 305
Austin, *Mrs.* Sarah, 194, 305
Avicenna, 115, 168
Axiaq, *Dr.* L., 173, 174
Axisa, *Dr.* S., 193
Azyr, Vicq d', 341, 385
Azzopardi, *Dr.* A. M., 475
Azzopardi, B., 62, 341
Azzopardi, *Dr.* Gaetano, 143, 441, 446, 482
Azzopardi, *Rev.* M., 382
Azzopardi, *Dr.* P. P., 274
Azzopardi, V., 290

Badat, Aurelio, *surgeon*, 274, 445, 449, 450, 487
Badger, G. P., 35, 302, 506
Balaguer, *Mgr.*, 28
Balbi, *Dr.* Ludovico, 521
Baldacchino, C., 6
Ball, *Sir* Alexander, 78, 96, 161, 311, 377, 448, 471, 473, 502, 504, 520, 521, 523
Ballance, *Sir* Charles, 551, 556
Ballard, G. A., 386
Ballingall, G., 119
Barbaro, R., 277, 278
Bardon, M. A., *surgeon*, 478
Barres, Jacques Philippe Gabriel de, 146, 147
Barth, *Dr.* Joseph, 148, 459, 541
Bartolo, A. E., 263
Bassett-Smith, P. W., 265
Baudoin, J., 39, 43
Bedford, W. K. R., 38, 47, 67, 73, 343, 392, 394, 410
Beer, *Prof.* Jos., 459
Bell, D. W., 265
Bellanti, P., 339
Bellet, *Abbé* D. S., 251, 252
Benedetto da Malta, 14
Benedict XIII, *Pope*, 467
Bernard, A. V., 165, 189, 190, 267, 283, 335, 561
Bernard, *Dr.* Federico, 542
Bernard, *Dr.* L., 109, 531, 533, 535, 538, 550
Bernard, *Dr.* S., 30
Bernard, *Dr.* Salvatore, 144, 493
Bernardy, A. A., 34
Bernstein, H. G. G., 263
Bezzina, *Dr.* Nicola, 521
Biagio, G. D., 446
Bianchini, G. F., 252
Bichi, *Fra* Giovanni, 96
Bigeni, G., 446
Blacas, *Bailiff* de, 383

Blaquière, E., 65, 67, 218, 312
Boccone, *Dr.* P., 503
Boileau, J. P. H., 246, 530
Boisgelin, Louis de, 38, 52, 53, 55, 65, 69, 123, 154, 175, 235, 273, 300, 310, 311, 339, 422, 503, 504, 506, 507, 525, 527, 557
Bonamico, *Dr.* Gian Francesco, 154, 173, 248, 502, 503
Bonelli, L., 436
Bonnici, *Dr.* Agostino, 450
Bonnici, Clemente Mifsud, 523
Bonnici, E., 211, 214, 217
Bonnici, Matteo, 172
Borg, *Dr.* Fabrizio, 350, 358, 359, 542
Borg, Salvatore, 176, 178
Borg, Stefano, 286, 287, 493
Borg, T., 12, 165, 182, 184, 188
Borg Cardona, S. R., 316, 321
Bosio, G., 391, 392, 393
Bosio, I., 224
Bosio, J., 39, 42, 43, 44, 115
Bouverie, *Sir* Henry Frederick, 161, 301, 452
Boyle, *Mrs.* Catherine, 400
Bradley, R. N., 5, 7
Braun, H., 326
Bressy, *Chev. Dr.* de, 535
Briffa, A. C., 191
Broadley, A. M., 146
Brown, Edward, 58
Bruce, Dr. A. M. D., 205
Bruce, *Sir* David, 67, 241, 242, 243, 246, 539
Brugnatelli, 508
Bruno, *Dr.* G. B., 482
Bruno, *Dr.* Giovanni, 143, 441
Bryant, J., 506
Brydone, P., 226, 235, 289, 507
Buck, *Dr.* J. M., 371
Budin, *Prof.*, 359
Bueno, *Bishop* L., 28, 382
Buffon, G. L. L., 226
Bugeja, J., 213, 215
Bugeja, *Father* Rosario, 182
Buonaparte, Napoleon, *see* Napoleon
Burmester, *Dr.* A. J., 544, 547, 549, 550
Burnett, *Sir* William, 154
Burrell, W. H., 177, 179, 182, 183, 186, 311, 329
Bussan, *Mgr.* Melchior Alferan, 69
Bussolin, G., 306
Busuttil, *Dr.* George, 551
Busuttil, R., 358, 361
Busuttil, V., 425, 426, 427, 428, 429, 430, 431, 435, 436, 506
Butler, *Miss*, 206
Butler, *Mrs.* Charlotte, 407
Byron, *Lord*, 303

Cabanis, *see* Cabany
Cabany (Cabanis), *Dr.* Ant., 470
Cachia, E., 361
Cagliares, *Mgr.* B., 27, 28
Cagliola, F., 120, 486
Cagliostro, *Count* Alexander, 146
Calamia, Joannes, 273
Calamia, *Dr.* Raimondo, 165
Calleja, *Dr.* Luigi, 546
Callus, Antonio, 18
Callus (Callusius), *Dr.* Joseph (known as Matthew), 17, 18, 19
Callus, Matthew, *see* Callus, Joseph
Callusius, *see* Callus, Joseph
Calogero Vinazzo, *Dr.* D., 148
Camenzuli, *Dr.* Giuseppe, 532, 535
Cameron, Charles, 290
Camilleri, Claudio, *surgeon*, 119, 478, 479
Camilleri, D. C., 450
Camilleri, Felice, 306
Camilleri, *Rev.* Giovanni Maria, 90
Camilleri, Giuseppe, *surgeon*, 478
Cammarasa, *Bishop* Balaguer, 426
Caraffa, *Grandmaster* Gregorio, 30, 300, 437, 497, 511
Carmichael, J. A. G., 265
Carpue, Joseph Constantine, 450
Caruana, A. A., 4, 7, 8, 9, 11, 12, 24, 339, 424
Caruana, *Archdeacon* F. Saverio, 36
Caruana, *Dr.* Francesco, 521
Caruana, *Bishop* F. X., 382
Caruana, Gatto A., 502
Caruana, V., 502
Caruana dei Conti Gatto, V., 13
Caruana Scicluna, G., 162, 241, 244, 315, 359
Cascaxares, *Fra* Mariano de, 146
Casolani, Annetto, 333
Casolani, *Dr.* Charles, 276, 277, 322, 323, 333, 334, 343
Casolani, R. L., 411
Casorio, *Dr.* Emmanuele, 535
Cassallo, J. P., 363
Cassar, G. C., 360
Cassar, Girolamo, 46
Cassar, *Jurat* Giuseppe, 91
Cassar, P., 113, 145, 363, 366, 367, 368, 373, 434, 540

Cassar, S., 237
Cassar Pullicino, J., 287, 424, 428, 429, 430, 431, 432, 433, 435, 439, 441, 448
Cassière, *see* La Cassière
Castiglioni, A., 7
Cauchi, *Miss* Carolina, 409
Cauchi, *Dr.* J., 511
Cavallini, *Dr.* Philippus, 173
Cazzola, *Dr.* Blasio, 467
Cefai, *Dr.* R., 431, 432, 433
Chadwick, Osbert, 282, 315, 318, 319, 324
Chamberlain, *Sir* Joseph, 188
Charles II, *King of England*, 49, 120
Charles V, *Emperor*, 37, 153
Chetcuti, *Dr.* Thomas, 192, 197, 221, 366, 367, 368, 369, 453, 455, 457, 458, 508, 528
Ciantar, G. A., 91, 160, 171, 172, 175, 503
Cilia, *Dr.* Nicolò, 466
Clapp, *Mrs.* Emilia Zammit, 408
Clapp, Henry Lyman, 408
Clark, J. M. P., 263
Clement V, *Pope*, 467
Clement XI, *Pope*, 90
Clement XIV, *Pope*, 445
Clermont, *Grandmaster* Annet de, 129
Clinquant, *Dr.* Giuseppe, 529
Clinquant, *Dr.* P., 532
Cocchi, Antonio, 441
Coleiro, C., 263
Coleridge, S. T., 226, 227
Collura, P., 29
Colt Hoare, *Sir* Richard, 60
Connaught, *Duke of*, 222
Cooke, J. H., 4
Cooke, M., 340
Cooper, Samuel, 534
Coppin, 57
Cornelio, Maddalena, 383
Cosmas, *St.*, 30, 49, 68, 91, 424, 427, 485, 513
Cossaeus, *Dr.* Joseph, 513
Costo, *Dr.* Giuseppe del, 487
Cottoner, *Grandmaster* Nicholas, 46, 300, 437, 446, 487
Cottoner, *Grandmaster* Raphael, 46, 465
Cremona, A., 427, 430, 433
Cren, *Dr.* A., 146
Cren, *Dr.* Fortunato Antonio, 228
Creni, *Dr.* Giuseppe Antonio, 412
Critien, A., 26, 40, 42, 81, 264, 265, 331, 337, 359, 360, 392, 523
Cumbo, S., 451
Currey, E., 120
Cutajar, F., 63, 524
Dal Pozzo, B., 38, 42, 121, 122, 160, 171, 172, 174, 299
Damian, *St.*, 30, 49, 68, 91, 424, 427, 485
Darmanin, J. F., 96
Darmanin Demajo, G., 45, 51, 63, 339
Darmanin Demajo, J., 121, 124, 126, 127, 128, 304
Davy, Humphry, 304
Davy, *Dr.* John, 154, 161, 187, 219, 253, 254, 285, 296, 304, 348, 354, 505
Debono, *Prof.* F., 463
Debono, Gio. Battista, 382, 383
Debono, J. E., 246, 263
Debono, P., 3, 18, 29, 339, 340
Debono, P. P., 263, 404, 441
Delicata, *Dr.* Gio. Carlo Grech, 249, 542
Demarco, *Dr.* Giuseppe, 153, 154, 192, 211, 218, 248, 251, 475
Depiro, G. M., 178, 183, 186
Desalvo, Ferdinando, 471
Descallar, *Fra* Nicolo Abry, 444
Dessoulavy, C. L., 57, 58, 224, 226, 227, 235, 289, 309, 326, 327
Dimech, *Dr.* Francesco, 274
Dingli, Nicola, 383
Dobbie, *Sir* William, 563
Domesticus, *physician*, 11
Doublet, P., 123, 146, 148, 226, 288, 490
Dreyfus, A., 472
Dubois, 247
Duchi di Salviati, *Mgr.* Gregorio, 440
Ducosso, *Dr.* Giuseppe, 466
Du Mont, *Sieur*, 58
Du Puy (Puis), *Grandmaster* Raymond, 38, 40
Duzzina, *Mgr.* P., 25, 26, 27, 68

Economo, C. von, 268
Edward VII, *King of England*, 222
Erbach, *Count of*, *see* George Albert
Esquirol, J. E. D., 368
Eton, W., 61, 118, 286, 290

Fabrizi, *Dr.* Paolo, 536, 537, 540
Fagge, C. H., 259
Falcone, P., 224, 225, 240
Falzon, *Dr.* G. F., 478
Fardella, *Col.* G. B., 78
Farigiani, Lorenzo, *apothecary*, 505
Farrugia, Giuseppe, 18, 175, 438, 503
Faulkner, *Dr.* Brook, 183
Fasani, T., 34
Faure, G., 256
Fedeli, C., 49

Ferdinand, *King of Naples and Sicily*, 519
Ferres, A., 3, 9, 11, 13, 17, 23, 29, 30, 49, 69, 84, 98, 99, 164, 210, 221, 227, 303, 341, 377, 382, 383, 421, 422, 423, 424, 425, 427, 438, 504
Ferris, A., *see* Ferres, A.
Festing, G., 294
Finus, Jacobus, 11
Fiorini, B., 23, 24
Fiorini, J., 514
Fiteni, L., 173
Fleming, G., 350
Fonceca, *Grandmaster* E. Pinto de, 441, 445, 447
Formosa, I. C., 361
Francolino, Gio. Batta Grimaldi, 513
Franconi, *Fra* Fabrizio, 366
Frederick II, *Emperor*, 16
Frederick II, *King of Sicily*, 499
Frederick II, *the Suabian*, 465
Frederick III, *King of Sicily*, 13, 24
Fremantle, *Lady* Sym, 416
Fremeaux, *Count* A. Formosa de, 522
Frisari, *Fra* Nicola, 146

Gafà, Lorenzo, 30, 382
Galea, A. M., 222, 234, 382, 383, 408, 409
Galea, Angelo, 185
Galea, G., 561
Galea, Prof. G. O., 458
Galea, J., 9, 10, 11, 17, 24, 225, 211, 214, 217, 264, 297, 307, 391, 511
Galen, 115, 168, 169, 465, 491
Galizia, *Dr.* J. S., 403
Gall, Franz Joseph, 368
Gallan, Pedro, 273
Galland, *Dr.* Charles, 219, 535, 537
Galli, Vincenzo, 440
Galton, Douglas, 66, 99, 100, 276, 280, 302, 321, 322, 334, 336, 337, 358, 378
Ganado, *Dr.* Albert, 80, 223, 275, 293, 491
Gargallo, *Bishop* Tommaso, 27, 29, 353, 391, 426
Garrod, A., 556
Garrugia, Vincent, *pharmacist*, 383
Garzes, *Grandmaster* Martino, 227
Gatt, Filiberto, *apothecary*, 28
Gatt, J., 17
Gauci, *Dr.* Filippo, 30
Gella, G. B., 336
Gemy, 212
Gentile, E., 78
Geoffroy, M., 427, 470, 507
George Albert, *Count of Erbach*, 55, 57
George V, *King of England*, 408, 410
Gerard, Peter, 38
Ghio, *Dr.* A., 156, 159, 199, 201, 202, 203, 204, 219, 231, 266, 270, 277, 283, 307, 322, 331, 336, 337, 358
Gibson, M. O. J., 265
Gipps, *surgeon*, 241
Girbi, Xema, 15
Godwin, G. N., 427
Gort, *Lord*, 563
Graefe, *Prof.* A. von, 459
Grant, *Sir* Patrick, 284, 322, 334
Gravagna, *Dr.* Francesco Leon, 176, 186, 274, 546
Gravagna, *Dr.* L., 193, 197, 253, 254
Gray, R. J., 99, 100
Grech, *Dr.* Archangelo, 483
Grech, *Dr.* Giuseppe, 130, 146, 448, 274
Grech, *Dr.* S., 416
Gregory XIII, *Pope*, 347
Gregory the Great, *Pope*, 428
Grenfell, *Sir* F. W., 324
Grillet, Em., 444
Grillet, Michele, *surgeon*, 146, 441, 490
Grillet, *Dr.* S., 455
Grima, Michel'Angelo, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 146, 438, 439, 440, 441, 442, 443, 444, 446, 447, 459, 482, 489, 493
Grimaldi, Vincenzo Cannarella, 470
Grunenberg, Carlo, 160
Guignard, F. E., 58
Gulia, *Dr.* Gavino, 212, 249, 265, 284, 332, 359, 369, 437, 438, 440, 444, 497, 541
Gurrini, Mauro, 513
Guthrie, D., 7

Hall, J. Falconer, 98
Hall, Marshall, 533
Hamilton, *Sir* William, 520
Hammurabi, 15
Hardman, W., 35, 59, 63, 65, 277, 290, 291, 301, 354, 472, 502, 519, 520, 521, 522, 523, 524, 525, 527
Healy, E., 408
Henin, Gabriele, *surgeon*, 132, 143, 438, 440
Hennen, *Dr.* John, 66, 96, 98, 99, 154, 155, 156, 160, 179, 180, 186, 187, 218, 219, 231, 236, 248, 249, 253, 274, 275, 296, 301, 313, 317, 328, 330, 354, 357, 429, 431, 432, 433, 449, 450, 472, 494, 508, 523
Henry V, *King of England*, 508
Henry VIII, *King of England*, 409
Hettanges, *Dr.* Weylandt d', 535
Hippocrates, 115, 158, 465

Hoare, *Sir* Richard Colt, 60, 310
Hobart, *Lord*, 290
Holman, R. L., 265
Holroyd, A. T., 294, 296
Hooper, *chemist*, 547
Horrocks, *Mrs.* Fitzgerald, 400
Hoskin, *Sir* J., 503
Houlton, *Lady*, 410
Houlton, *Sir* Victor, 410
Howard, John, 48, 49, 59, 60, 73, 154, 218, 289, 291, 300, 353, 393, 394
Hughes, *Dr.* M. L., 155, 162, 240, 241, 242, 246, 323, 539
Hughes, Q., 46
Hunter, John, 441
Hyrcanus, John, 38

Imbert, *Dr.* George, 144, 412, 446
Inglott, *Sir* Ferdinand V., 84, 105, 108, 229, 276, 306, 365, 371, 378, 379, 397, 456, 457
Inglott, *Dr.* G. F., 256, 361, 538
Ingrassia, G. F., 506
Innocent II, *Pope*, 38
Innocent III, *Pope*, 54

Janet, P., 146
Jenner, Edward, 251, 252, 540
Jenkins, T., 514
Joseph II, *Emperor*, 459
Julyan, *Sir* Penrose, 36, 83, 84, 227, 280, 281, 350, 380, 407, 437, 492

Keenan, Patrick Joseph, 458, 463, 464
Keith, A., 3, 6
Kerr, A., 425
Kevin, *Mother* M., 409
Kiechel, Samuel, 57, 225
Kirker, G., *surgeon*, 246
Koch, Robert, 204, 205, 539, 542
Kraus, E., 55, 124

Labini, *Bishop* V., 69, 383, 522
La Cassiere, *Grandmaster* Jean l'Evesque de, 46, 225, 240
Laferla, A. V., 7, 37, 184, 185, 292, 300, 377, 380, 393, 555
La Gravière, J. P. E. de, 121, 122
Lagumina, B. G., 14, 15, 16
Lambert, G., 207
Lascaris Castellar, *Grandmaster* Jean Paul, 53, 160, 299, 473, 500, 503
La Sengle, *Grandmaster* Claude de, 43
Laurenza, V., 259, 446
La Vallette, *Grandmaster* Jean de, 18, 19, 43, 114

Lazarus, *St.*, 210
Le Marchant, *Sir* Gaspard, 276, 333, 371, 510
Leone Maltese, 14
Leoni, Giovanni Battista, 240
Leopardi, E. R., 13
Lewis, M., 130
Liebreich, R., 536
Lind, James, 64
Linnaeus, 503
Lipscomb, F. E., 265
L'Isle Adam, *Grandmaster*, 17, 18, 39, 221
Lister, Joseph, 541
Locano, *Dr.* Giorgio J. B., 446, 447, 448, 490
Lockhart, J. G., 294, 303, 328
Loubenx Verdalle, *Grandmaster* Hughes de, 46, 77, 299
Louis, Anthony, 442
Louis IX, *King of France*, 12
Louis XVI, *King of France*, 50, 149
Ludovicus, St., *King of France*, 486
Luke, *St.*, 9, 10

Macfarlane, A. M., 243
MacGill, T., 97, 161, 295, 305, 357, 382, 431, 433
Mackay, Alexander, *surgeon*, 75
Mackinnon, A. G., 555, 557
Maempel, J. Spiteri, 529
Maggi, *Dr.* Enrico, 440, 442
Magri, M. A., 444
Magrin, Gregorio, 514
Maitland, *Sir* Thomas, 36, 103, 104, 184, 185, 236, 274, 293, 301, 376, 423, 449, 450, 455
Malcolm, *Vice-Admiral Sir* P., 97
Mallia, *Dr.*, 536
Manché, *Dr.* Charles, 237, 539
Manché, *Prof.* Lawrence, 235, 237, 458, 459, 536
Manning, *Cardinal* H. E., 333
Margaret of Aragon, 13
Maria Theresa, *Empress*, 459
Marshall, *Dr.* Jos. H., 252
Marston, *Dr.* J. A., 240, 269, 530, 539
Martin I, *King of Sicily*, 12
Martin II, *King of Aragon*, 12
Martin, B. H., 514
Martin, R. M., 179
Mary, *Queen*, 408, 410
Maunsell, T., 297, 359
Mayer, Anthony, 443
Mercieca, V., 319, 320
Mesmer, F. A., 145, 146, 148

Methuen, *Lord*, 359
Meyer, *Prof.* E., 458
Micallef, *Dr.* E., 475
Micallef, *Dr.* Francesco, 535
Micallef, *Sir* Richard, 31, 36, 74, 84, 94, 187, 301, 307, 308, 376, 377, 381
Micallef, Saverio, *surgeon*, 274
Mifsud, A., 14, 17, 23, 31, 46, 49, 52, 96, 160, 273, 292, 298, 321, 327, 347, 406, 438, 440, 449, 466, 498, 522, 523
Mifsud Bonnici, C., 88
Mitrovich, G., 98, 156, 254, 294, 451
Mocenigo, M. Nani, 124
Mondion, *Chevalier* Henri de, 91
Molina, *Bishop* M. G., 68, 382
Monte, *Grandmaster* Pietro del, 327
Morana, J., 191
Morris, *Major* A. H., 319
Morton, William Thomas, 544
Mozley, A., 304
Mustapha Basha, 119

Nannoni, Angiolo, 441
Napoleon I, 34, 62, 233, 301, 519
Napoleon III, 333
Narborough, *Admiral Sir* John, 172, 300
Naudi, *Dr.* Agostino, 450
Nelson, *Lord*, 96, 519, 520, 521, 522, 523, 524
Newman, *Cardinal* J. H., 303, 304, 333
Nicolay, 327
Nightingale, Florence, 50, 67, 84, 378, 400, 401
Non, M. de, 310
Nussolin, G., 291

Oakes, *Sir* Hildebrand, 178, 184
O'Ferrall, *Sir* Richard More, 85, 296, 406
Omedes, *Grandmaster* Jean d', 43
O'Malley, I. B., 401
O'Malley, *Rev.* T., 453
Ornieri, Giovanni, 513

Pace, *Bishop* Pietro, 408, 409
Paladini, Filippo, 485
Palmieri, *Bishop* David Cocco, 28
Papalla, *Fra* Nicolò, 23, 24
Paradis, *Miss*, 148
Parenti, G. C., 114
Parisi, *Dr.* Pietro, 26, 44, 154, 165, 167, 225, 428, 489
Pasteur, Louis, 250, 538
Paul, *St.*, 9, 10, 23, 30, 427, 506
Paule, *Grandmaster* Antoine de, 51, 500
Pavey, A. E., 6
Peet, T. E., 5, 7
Pellegrino, Giacomo di, 13
Pentimolli, *Dr.*, 472
Perellos y Roccafull, *Grandmaster* Ramon, 29, 47, 121, 298, 483, 487, 571
Pettenkofer, Max von, 205, 371, 539
Philip II, *King of Spain*, 19
Pietro, *Don*, 10
Pinel, P., 368
Pinto, *Grandmaster* Manoel (Emmanuel), 31, 120, 144, 146, 226, 274, 275, 488, 504
Pisani, *Dr.* J., 435
Pisani, *Dr.* Luigi, 86, 537
Pisani, *Prof.* S. L., 192, 198, 199, 200, 204, 205, 207, 282, 297, 319, 323, 397, 414, 415, 449, 539
Pius V, *Pope*, 467
Pliny, Caius, *the second*, 9, 432
Portelli, *Dr.* Gavino P., 450, 534
Portelli, *Dr.* Patrizio, 455
Portelli, *Dr.* Vincent Dionysius, 449, 505
Portelli, Carbone, *Prof.* A., 268
Potter, Mary, 408
Porter, W., 53, 61, 327
Predal, Alonso, 273
Preti, Mattia, 48, 422
Preziosi, Alexander, 514
Preziosi, *Dr.* Anthony, 548
Preziosi, L., 237, 238
Priest, S., 425
Pringle, *Sir* J., 158
Publius, *delegate of Praetor of Sicily*, 9
Pullicino, *Dr.* Andrea, 542
Pullicino, *Rev.* Joseph M., 383
Pullicino, P., 145
Pye-Smith, P. H., 259

Quintinus, G., 235

Ramazzini, 158
Ramazzini, *Dr.* Bernardino, 384
Ramuzzi, Paolo Emilio, 170
Ransijat, B., 63, 524, 525
Raven, R. W., 406
Ray, John, 57
Raynaud, 212
Raynaud, *Dr.* F., 477
Reboul, G., 287, 289
Redin, *Grandmaster* Martin de, 71, 480
Reid, *Sir* William, 371
Ressegnier, *Fra* Clemente, 444
Ricci, I., 299
Richardson, J., 275, 491
Ritchie, M. B. H., 244

Robert, *Dr.*, 61, 62, 63, 64, 65, 154, 519, 524, 525, 526
Robinson, 547
Roccafull, Ramon Perellos y, *see* Perellos y Roccafull, Ramon
Roger, *Count*, 11
Roger II, *King*, 465
Rohan, *Grandmaster* Manoel (Emmanuel) de, 32, 56, 145, 146, 175, 290, 310, 321, 376, 394, 447, 467, 501
Rossi, E., 119, 125, 131
Ross, J., 194, 305, 356
Roth, C., 14
Royas, *Fra* Martino, 24, 25
Russo, *Dr.* Camillo, 274
Rutter, *English Consul*, 289

Saba, Abraham, 15, 16
Sabbat, Lia, 14
Sabbato, *physician*, 17
Safaradi, Abraham, 14
Safaradi, Braccone, 14, 16
St. Jean d'Angely, Regnaud de, 62
St. Priest, *Comte de*, 58
Sala, Dr. Jacobo Sebastiano, 274
Salvatus, *Magister, apothecary*, 13, 499
Sammut, *Dr.* Lorenzo, 534
Samut, *Dr.* Clo., 460, 463
Sandys, George, 57, 225, 298, 299
Sankey, F., 218
Sarria, Martino de, 422
Saura, Isabella, 382
Saura, Nicolò, 381
Saydon, *Dr.* G. B., 211, 256
Saydon, P. P., 462
Scappi, Caterina, 69, 70, 71
Scebarras, *Dr.* Gio. Domenico, 467, 480
Schembri, *Dr.* G. B., 295, 296, 416, 536, 537, 538
Schinas, *Prof.* C. G., 212, 255, 456, 540
Schinas, *Prof.* G. C., 282, 315, 324, 367
Schinas, *Dr.* Luigi Curmi, 361
Schreiber, *Sir* Edmund, 263
Scicluna, *Dr.* G., 205
Scicluna, H. P., 61, 62, 445
Scicluna, W., 301
Scott, *Sir* Walter, 294, 303, 328
Seddall, H., 104, 226, 491, 494
Seddon, *Prof.* H. J., 263
Segond, G., 201, 249, 250, 342
Semprini, G., 225
Shaw, C., 289
Simmons, B. Lintorn, 376, 510
Simmons, *Sir* J. A. Lintorn, 206, 344, 380
Simon Maltese, 14
Simpson, James Young, 548
Singer, Charles, 4
Siveri, Pietro, *surgeon*, 513
Skippon, *Sir* Philip, 57
Slade, A., 306
Snipe, *Dr.* John, 96
Soldanis, Agius de, 119
Sonnini, 226
Speranza, *Dr.* Anthony, 194
Spinola, *Fra* Paolo Raffaele, 99
Spiril, *physician of Marseilles*, 174
Stewart, J. Purves, 556
Stewart, P. D., 265
Stilon, A., 507, 508
Stilon, G. M., 194, 195, 196, 198
Storks, *Sir* Henry, 334, 417
Sutherland, John, 66, 67, 99, 100, 202, 203, 276, 280, 302, 317, 318, 319, 321, 322, 325, 330, 331, 332, 333, 336, 337, 358, 378
Symonds, C., 556

Tabone, V., 239
Tagliacozzi, Gaspare, 139
Tallack, W., 296
Taylor, *Mrs.* John, 305
Teonge, *Rev.* Henry, 58, 120, 174, 175, 299, 300, 328
Terrario, G., 528
Texada, *Grandmaster* Ximenes de, 447
Thackeray, W. M., 305
Thein, *see* Theij
Theij (Thein), *Dr.* Lorenzo, 146, 446, 468
Thevenot, Jean de, 58, 235
Thomas of Villanova, *St.*, 73
Thompson, C. J. S., 508
Thompson, *of U.S. Bureau of Animal Industry*, 243
Thornton, W. H., 56, 93
Tigne, *Fra* René Jacob de, 146
Tidbury, *Surgeon-major*, 241
Townsend, G. F., 527
Troubridge, *Sir* Thomas, 521, 522
Tucker, Charles, 236
Tully, J. D., 182, 185
Tunbridge, R. E., 263
Tuscany, *Grand Duke of*, 165

Ugolini, L. M., 4

Valentini, R., 12, 18, 23, 499
Vassallo, G. A., 19, 44, 53, 118, 165, 172, 175
Vassallo, W., 286

Vaubois, *General*, 62, 65, 519, 523, 524, 525, 526, 527
Vella, E. B., 161, 339, 429
Vella, *Dr.* Emmanuel, 551
Vella, V., 424, 537
Verdala, Hughes Loubenx de, *see* Loubenx de Verdala
Vertot, *Abbé* de, 29, 42, 51, 52
Vesalius, Andreas, 441
Vianello, C. A., 225
Victor I, *Pope*, 10
Vilhena, *Grandmaster* Antonio Manoel de, 31, 83, 91, 144, 221, 299, 300, 309, 376, 438, 467, 473, 494, 501, 511
Villaragut, *Fra* Giovanni, 53
Vinazzo, D. C., 146, 148, 149
Visconti, A., 439
Visconti, *Mgr.* Gaspare, 240
Vivenzio, G., 385
Vivion, Lieut. J., 524

Walpole, *Lady* Georgina, 294
Walsh, T., 88
Waring, George, 304, 305, 313
Watt, *Dr.* William Couborough, 545, 549
Webster, W. B., 75, 105, 379, 494
Wells, Thomas Spencer, 97, 249, 535, 544, 545, 546, 547, 549
Widal, F., 242
Wignacourt, *Grandmaster* Aloiphus de, 29, 316, 511
William of Aragon, 13
Williams, R. S., 265
Wilson, *Rev.* S. S., 302, 303
Wolff, Joseph, 294
Wyatt, T. H., 378

Xeberras, *Dr.* Gio. Domenico, 173, 487
Xema, *surgeon*, 16
Xiberras, G. D., *see* Xerrabas, Gio. Domenico
Xuereb, *Dr.* F., 372, 373, 374
Xuereb, *Dr.* G., 407

Zammit, *Capt.* Charles, 9
Zammit, *Dr.* Giuseppe, 211, 437, 438, 439, 487, 497
Zammit, L., 429
Zammit, *Miss* Mary, 408
Zammit, *Dr.* Nicola, 332, 367, 453, 548
Zammit, Themistocles, 4, 5, 8, 9, 12, 13, 19, 99, 153, 162, 164, 171, 189, 219, 242, 243, 244, 246, 316, 317, 319, 320, 347, 429, 443, 444, 448, 449, 482, 542
Zammit-Tabona, V., 221
Zarb, S., 17
Zarb, G., 424
Zondadari, *Grandmaster* Marco Antonio, 90, 91, 438

Subject Index

Abdominal surgery, 142–143, 537–538
Acts of Parliament, *see* Laws and Regulations, etc.
Acts of the Apostles, 10
Adenitis, 153
Adoption, provisions for, 353, 354
Aged, care of, 375–383
Ague, *see* Malaria
Alimentary system, disorders, folk remedy, 432, 433
Aloe vulgaris, 504
Amputation, before eighteenth century, 141–142
Anaesthesia, introduction of, 537, 544–551
— in sixteenth century, 114
Anatomy, teaching, 438, 454, 460
Animal magnetism, 144–149
Anopheles maculipennis, 162, 163, 523
Anthrax, 153
Antisepsis, introduction of, 538
Antonine Hospitallers, 59
L'Ape Melitense, 540
Apoplexy, 153
Apothecary,
— duties, 31, 32, 54
— licensing, 468
— regulation of practice, 473
— salary, 488–492
— *see also* Pharmacy
Arab domination, 11
Asepsis, introduction of, 538–539
Asthma, 153
Asylum for the Aged and Incurables, Floriana, 375–381, 561
Attard Hospital for Mental Diseases, 371–374, 407, 562
Avitaminosis, 63

BCG vaccination, 220, 221
Barber-surgeons, duties, 33, 54
— regulation of practice, 473
— salaries, 488–492
— *See also* Surgeons
Barracks, sanitary state of, 332
Il Barth, 541, 542
Baths, Roman, 8
Benedictine Nuns, 13
Bighi Naval Hospital, 95–98
Birgu, Holy Infirmary, 37–45, 113, 114, 352, 391
— Hospital of the Italian Langue, 37–45, 113
— Vittoriosa Military Hospital, 98
Birkirkara Government School, as temporary hospital, 562
Black Death, *see* Plague, bubonic
Bloodletting, 135, 156, 174
Blue Sisters, 95, 361, 402, 408–409
Blue Sisters Hospital, Sliema, 556, 562
Board of Health, 292–294
— *See also* Public Health Department
Bombing, psychological effects of, 559–560
Bormla Government Elementary School, as temporary cholera hospital, 206
Botanical garden, 497, 502
British Empire Society for the Blind, 363
British Medical Association, Malta Branch, 542–543
British Nurses Association, 403
British Red Cross, 263, 556
British Seamen's Hospital, Floriana, 93–95, 401
Bronchitis, 432
Brucellosis ('erratic fever', Gastric remittent fever, Malta fever, undulant fever) 153, 155, 240–247, 539, 566
— Royal Commission on, 1912, 245
Brugnatelli's Pharmacopoeia, 508
Bugeja Technical School, as temporary hospital, 562
Burials, regulations for, 339–344

Caesarian section, 537, 538
Caries, dental, in Neolithic man, 6
Casa delle alunne, 77
Casa di Carità, Floriana (Ospizio), 193, 203, 348, 354, 364, 366, 375–377, 381, 407
Cassel Hospital, 133
'Casetta' for Incurable Women, Valletta, 66–76, 228, 364, 393, 394
Castration, in Neolithic man, 6
Catarrhal diseases, 63, 153
Cemeteries, *see* Burials

Central Hospital, Floriana, 83–88, 263, 397, 398, 402, 403, 407, 413, 556, 562
Centre for the Blind, 363
Cerebrospinal fever, 267, 566
Charitable Institutions, Committee of, 36, 86, 93, 94, 281, 283, 348, 350, 365, 376, 397, 398, 399, 414
— — administration, 102–110, 284
Charity, organisation of, 347, 348
— *see also* Public Health and Welfare
Chemistry, teaching of, 497
— *see also* Pharmacy
Chest surgery, 142–143
Chestpiece, 542
Child welfare, *see* Welfare, child
Children's hospitals, *see* Hospitals, children's
Cholera, 153, 192–209, 260, 318, 319
— contagion theory of, 195, 196, 200
— epidemic, 1837, 192–199, 399
— — 1848, 199
— — 1850, 199–201, 542
— — 1854, 201
— — 1865, 201–204, 329, 399
— — 1867, 204
— — 1887, 204, 323, 324, 335
— — 1911, 208–209
— miasma theory, 205
— mortality, 197, 203, 207–209
Circumcision in Neolithic man, 6
Civil Hospital for Men, *see* Hospitals, Valletta
Code de Rohan, 310, 394–396, 417, 467, 468, 474
Colchicum autumnale, 504
Commissions and Committees of Enquiry, Royal Commissions, etc.
— 1754–1755, malaria epidemic, 158
— 1780, burial grounds, 341
— 1781, malaria epidemic, 158
— 1783, mesmerism, 146, 148
— 1793, malaria, 160
— 1800, fever epidemic, 155, 156
— 1801, malaria, 159
— 1812, Royal Commission, 105
— 1836, Royal Commission, report on foundlings, 354
— 1837, Commission of Enquiry, 92
— 1862, Committee of R.C.P. on leprosy, 212
— 1883, leprosy, 213
— 1907, Mediterranean fever, 314
— 1912, Royal Commission on brucellosis, 245, 494
— 1917, leprosy, 216
Commissions and Committees of Enquiry, Royal Commissions, etc.—*continued*
— 1923, Kala Azar Commission of Royal Society, 265
— 1932, Pasteurisation of goats' milk, 246
Commissioners of Sick and Poor, 347
Compulsory Education Act, 1946, 363
Connaught Hospital, Mdina, 99, 221, 223, 562
Conservatorio, Floriana, 83
Consumption, definition of, 219
— *see also* Tuberculosis
Contagion theory, of cholera, 195, 196, 200
— of plague, 173, 174, 179
Convicts, as nurses, 393, 394
— as street cleaners, 312, 313
— care of, 81
Cottonera Military Hospital, 99-100, 556
Counter-irritation, 4
Cremation, 7–8
Cuminium cyminum, 505
Cynomorium coccineum (*Fungus melitensis*), 502, 503, 504

David Bruce Military Hospital, Mtarfa, 67, 100, 556
Deaf Children's Unit, 363
Death rate, *see* Mortality
Dementia, treatment by mesmerism, 148
Dengue, 267–268
Dentistry, development of, 513–516
Department of Labour and Social Welfare, 387
Depression, *see* Melancholia
Diarrhoea, epidemic, 63, 64, 322, 380
Diphtheria, 153, 265–266, 308, 566
Disease, classification, 34, 48, 49
— in Roman Malta, 9
— infectious, burial question, 343
— — caused by inadequate drainage, 322
— — isolation and quarantine, 87, 88, 176, 286–289, 362
— — laws relating to, 283
— — notification of, 283
— — theories of, 116, 173, 174, 179, 195, 196, 200, 205, 240, 322, 539
— pattern in Malta, 116, 153–270, 519–527, 565–567
District Medical Service, 275, 347–351
District nursing, *see* Nursing, district
Dominican Sisters, 409
Drainage, 282, 321–325
— *See also* Housing
Dry earth system, 322
Dysentery, 63, 116, 153, 527

Edinburgh Medical and Surgical Journal, 549
Education, medical, 437–464, 486–488
— — in fifteenth century, 15, 17
— — in twentieth century, 461–464
— — reform, 451, 452, 457–461
— — regulation of, 467, 468
— surgical, 437–439
Emergency Medical Service, 561–563
Employment Injuries Insurance Bill, 1951, 386
Employment of Children (Regulation) Ordinance, 1944, 387
Encephalitis lethargica, 268
Enquiries, commissions and committees, *see* Commissions of Enquiry, etc.
Enteric fever, 155
Epilepsy, 140, 148, 434, 153
'Erratic fever', *see* Brucellosis
Erysipelas, 135
Evil eye, 426, 434
Eye diseases, hospital for, 99
— treatment by mesmerism, 147

Factories Ordinance, 1940, 387
Factories Regulation Act, 1926, 387
Factories (Health, Safety and General Welfare) Regulations, 1945, 387
Falanga, Valletta, 232
Famine, during French occupation, 519–527
— during plague epidemic, 1592–93, 166
Favus of scalp, 153
Fertility rites, 6
— symbols, 5
Fever(s), 64, 122, 135, 153–156, 260, 322, 431, 521, 523
— classification, 154, 155
— Commission of enquiry into cause of epidemic, 155, 156
— theories of causation, 155, 156, 314
— *see also* specific fevers (e.g. Malaria, Brucellosis, etc.)
Ficus sativa, 504
Il Filocamo, 541
Fistulae, early treatment, 135, 136
Floriana, British Seamen's Hospital, 93–95, 401
— Central Hospital, 83–88, 263, 397, 398, 402, 403, 407, 413, 556, 562
— Conservatorio, 83
— Franconi Asylum, 366, 368, 369–371
— House of the Madonna of Manresa (Military), 98–99
— King George V Military Hospital, 100, 101
Floriana, Ospizio (Casa di Carità), 193, 203, 348, 354, 364, 366, 375–377, 381, 407
— St. Vincent de Paul Hospital (Asylum for the Aged and Incurables, Poor House), 375–381, 561
Folk medicine, 430–433
Folklore, medical, 422–436
Foodstuffs, control of, 275, 283
Forest Hospital, St. Julian's Bay, 99, 556
Fort Chambrai Lunatic Asylum, 372
Fort Ricasoli, used as cholera hospital, 193, 194
Foundling Hospital, Valletta, 69, 348, 353, 355
Foundlings, care of, 25–27, 42, 48, 352–353, 377
Fractures, treatment of, 139, 534
Franconi Asylum, Floriana, 366, 368, 369–371
French disease, *see* Syphilis
French occupation, 34, 61–65, 519–527
Fungus melitensis, *see Cynomorium coccineum*

Galley slaves, nursing of, 49
Gangrene, 135, 141
Gastric remittent fever, *see* Brucellosis
General Hospital Fund, 88
Ghajn Tuffieha Hospital, 556
Giornale di Malta, 471
Gonorrhoea, *see* Venereal disease
Government Dispensary, *see* Hospitals, Valletta
Government Pasteurisation Centre, 314
Gozo, Fort Chambray leprosarium, 217
— Fort Chambrai Lunatic Asylum, 372
— Isolation Hospital, 308, 409
— St. Julian's (Hospital of St. John the Evangelist, Hospital of SS. Cosmas and Damian), 13, 68, 69
— Victoria Hospital (Hospital of St. John the Baptist and St. Anthony of Padua), 90–92
— Women's Hospital, 68–69
Grand Hôpital, Valletta, *see* Valletta, Holy Infirmary
Great Siege, 1565, 113–117

Haemorrhage, treatment of, 136–137
Hamrun, Cini Maternity Hospital, 562
— Hospital, 556
— Ophthalmic Institute, 237
— St. Paul's Home, 383
Head injuries, treatment, 137–138

Headache, treatments, 140, 431
Health Commission, 1530, 273
Health Department, *see* Public Health Department
Hernia, treatment of, 537
Holy Infirmary, Birgu, 37–45, 113, 114, 352, 391
Holy Infirmary, Valletta, 46–67, 77, 132–143, 228, 352, 391, 392, 396, 467, 470, 500, 556
Hospital ships, 124
Hospitaller Nuns, 406
Hospitals, abolition of St. John of Jerusalem, effects, 59
— children's 263, 265, 361–362
— — *see also* Sliema, Zammit-Clapp; Valletta, Casa delle Alunne, Foundling Hospital, Orphan Asylum; Verdala Palace Orthopaedic Hospital
— isolation, 307–308
— — *see also* Gozo, Isolation Hospital; Kemmuna, Isolation Hospital
— Lazaretto, 298–308
— — *see also* Manoel, Lazaretto; Rinella, Lazaretto; Valletta, Lazaretto
— mental, 364–374
— — *see also* Attard, Lunatic Asylum; Floriana, Franconi Asylum; Gozo, Fort Chambrai Lunatic Asylum
— military, 99–101, 556
— — *see also* Birgu, Vittoriosa Military Hospital; Cottonera, Military Hospital; Floriana, House of the Madonna of Manresa; Floriana, King George V Hospital; Valletta, Military General Hospital
— naval, 93–98
— — *see also* Bighi, Royal Naval Hospital; Floriana, British Seamen's Hospital
— organisation during World War I, 555
— pre-natal clinics established, 360
— women's, 68–76
— — *see also* Mdina, St. Peter's Hospital; Gozo, Women's Hospital; Valletta, Magdalen Asylum; Valletta, Incurable Women
House of Industry, 83, 348, 354, 377
House of the Madonna of Manresa, Floriana, 98–99
Housing, 279, 282, 326–338
— Manderaggio, 329, 330, 331, 336
— *see also* Drainage
Hydrocephalus, trephining for, 140
Hydrophobia, 153
Hydrotherapy, 374
Hygiene, *see* Public health and hygiene
Hypogeum of Hal Saflieni, 5

Imperial Social Hygiene Congress, 1929, 231
Imperial Weights and Measures Act, 508
Industrial Health, 384–387
Infant mortality, *see* Mortality, infant
Influenza, 220, 259–261
Inquisitor, disputes with Order of St. John of Jerusalem, 52
Insane, care of, 48, 106, 364–374
Insanity, folklore, 433–436
Instruments, clinical, 529–530, 533
— surgical, 133, 531–532, 533
Intermittent fever, 153
International Sanitary Convention, 1926, 297
Isolation hospitals, *see* Hospitals, Isolation
Italian Langue, *see* St. John of Jerusalem

Jaundice, folk remedy for, 428
Jewish physicians, monopoly in fifteenth century, 14
Journalism, medical, 540–542
Journals,
— *Giornale di Malta*, 471
— *The Malta Times*, 544, 547
— *Public Opinion*, 230
— medical, *l'Ape Melitense*, 540
— — *Il Barth*, 541, 542
— — *The Chestpiece*, 542
— — *Edinburgh Medical and Surgical Journal*, 549
— — *Il Filocamo*, 541
— — *La Saluta Publica*, 542

Kala Azar, *see* Leishmaniasis
Kala Azar Clinic, 265, 361
Kemmuna Isolation Hospital, *see under* Hospitals, Kemmuna
King George V Military Hospital, *see* Hospitals, Floriana

Laboratory work, 539–540
Laparotomy, 537
Laws, Proclamations, Acts of Parliament, Orders in Council, etc., concerning Public Health and Welfare
— Constitutiones of Sicily applied in Malta, 465
— of Knights of St. John regulating practice of medicine, 466

Laws, etc.—*continued*
— 1101–54, of Roger II, 465
— 1197–1250, of Frederick II, 465
— 1458, quarantine, 285
— 1526, quarantine, 286
— 1586, street hygiene, 309
— 1591, Maltese synodal constitutions, 467
— 1625, Maltese synodal constitutions, 467
— 1631, Capitular Ordinances, 70, 391, 392
— 1640, Prammatiche, 473
— 1650, Proclamation limiting practice of surgeons and barbers, 473
— 1724, code de Vilhena, 309, 467, 474, 494
— 1739, street hygiene, 309
— 1784, code de Rohan, 310, 394–396, 417, 467, 468, 474
— 1796, street hygiene law, 310
— 1797, code de Rohan confirmed, 468
— 1800, street hygiene, 311
— 1801, street hygiene, 311
— 1814, licensing of physicians, surgeons, apothecaries, midwives, 468
— 1828, Imperial Weights and Measures Act, 508
— 1854, Criminal Code, 468, 474, 475
— 1861, Ordinance VI (Inspection of Prostitutes), 229, 230
— 1886, Medical Act, 468, 469
— 1900, first Sanitary Ordinance, 282
— 1901, Ordinance VII, licensing of practitioners, 468, 469, 474, 475
— 1901, Ordinance XVII (Second Sanitary Ordinance), 283, 469, 474, 475
— 1903, Paris Convention (Quarantine Regulations), 297
— 1904, Third Sanitary Ordinance, 283
— 1908, Fourth Sanitary Ordinance, 283
— 1919, Nurses Regulation Act, 403
— 1920, Venereal Diseases Ordinance, 230
— 1920, Workmen's Compensation Ordinance, 386
— 1926, Factories Regulation Act, 387
— 1929, Workmen's Compensation Act, 386
— 1930, Ordinance VII (Transmission of Venereal Diseases), 230
— 1933, Weekly Rest (Bakers and Barbers Act), 386
— 1939, Ordinance XV, 475
— 1940, Factories Ordinance, 387
— 1943, Venereal Diseases (Treatment) Regulations, 231
— 1944, Employment of Children (Regulation) Ordinance, 387

Laws, etc.—*continued*
— 1945, Factories (Health, Safety and General Welfare) Regulations, 387
— 1946, Compulsory Education Act, 363
— 1948, Venereal Diseases (Treatment) Act, 230
— 1951, Employment Injuries Insurance Bill, 386
— 1956, National Insurance Act, 386
Lazaretto, Manoel, 166, 183, 287, 288, 298–300, 307, 308
— Rinella, 298
— temporary, 299
— Valletta, 166–168, 181, 298
Leeches, supply of, 156, 528–529
Leishmaniasis (Kala Azar), 264–265, 429
Leprosarium, Mghieret, 214
Leprosy, 210–217
Lithotomy, 143
Little Company of Mary (Blue Sisters), 95, 361, 402, 408–409
Lock Hospital, 232–234
Lunatics, *see* Insane
Luqua, St. Bartholomew's Hospital, 562

Magdalen Asylum, Valletta, 227
Magic, and healing, 426
Magico-religious practices, 425–430
Malaria (Ague), 122, 157–163, 319, 523
— *see also* Fever
Malta fever, *see* Brucellosis
Malta Medical Society, 542
Malta Times, 544, 547
Maltese dogs, therapeutic use of, 9
Maltese Medical Academy, 486–488
Manderaggio, *see under* Housing
Manoel, Isolation Hospital, 206, 208, 556
— lazaretto, 166, 183, 287, 288, 298, 299, 300, 307, 308
Mater Boni Consilii School, as temporary hospital, 562
Materia medica, indigenous, 502–508
Mdina, Connaught Military Hospital, 99, 221–223, 562
— St. Peter's, 13, 68
Measles, 153, 156
Medical Board, 494
Medical and Health Department, *see* Public Health Department
Medical Societies, *see* Societies, medical
Medicine, practice of, 465–496, 528–529
— *see also* Physicians

Mediterranean Fever Commission, 1907, *see under* Commissions, etc.
Mediterranean fever, *see* Brucellosis
Melancholia, 140, 144
Mellieha, Thirty-Ninth General Hospital, 258
Mental Diseases, Hospital for, 371–374, 407, 562
Mercurial treatment, for syphilis, 232–233, 394
Mesmerism, 144–149
— Commission on, 146, 147, 148
Mghieret, leprosarium, 214
— Poor House, 355
Miasma, theory of pathogenesis, 539
— — in brucellosis, 240
— — in cholera, 205
Micrococcus melitensis vel Brucii, 241
Midwifery, 412–418
— licensing, 468
— training, 415, 416, 417, 450, 457
Military General Hospital, Valletta, *see under* Hospitals, Valletta
Military Hospitals, *see* Hospitals, military
Monastery of St. Mary Magdalen, *see* Valletta, Civil Hospital
'Moral' treatment, of lunatics, 374
Mortality, cholera, 197, 203, 207, 209
— decline in death rate, 283
— fever, 154
— infant, among foundlings, 354, 356–361
— plague, 166, 170, 172, 175, 183, 184, 186
— polio, 264
— pulmonary affections, 219
— scurvy, 525
— smallpox, 254
— statistics of weekly, 276
— World War II, 558–559
Mortuary rooms set up, 343
Mothers and Infants Health Association, 359
Mtarfa Hospital, 67, 100, 556

National Health Service, 495
National Insurance Act, 1956, 386
National Museum, Valletta, collection of pharmacy jars, 510
Naval Hospitals, *see* Hospitals, Naval
Naval Medical Services, under Order of St. John, 118–131
Neanderthal Man, vestiges of, 3
Newspapers, *see under* Journals
Night blindness, 64, 524
Nurses, registration of, 404
Nurses Regulation Act, 1919, 403
Nursing, 391–411
— district, 404–406
— lay, in 1887 cholera epidemic, 206, 207
— mental, 372
— private, 406
— under Order of St. John of Jerusalem, 27, 33, 391, 392

Obstetrics, teaching of, 412
— *see also* Midwifery
Office of Social Statistics, 276
'Ophthalmia', 236
— *see also* Trachoma
Ophthalmic Institute, Hamrun, 237
Ophthalmology, 458, 535–536
Orphan Asylum, Valletta, 82, 355, 407
Orphans, *see* Foundlings
Orthopaedic service established, 263
Orthopaedic surgery, 536–537
'Ospedaletto', *see* Valletta, Incurable Women
Ospizio, Gozo, 381
Outdoor relief, 106

Paleolithic age, archaeological remains, 3, 4
Paris Convention (Quarantine Regulations), 1903, 297
Pasteurisation Centre, Government, 314
Pediculosis, 566
Pertussis, folk remedy for, 429
Petechial fever, 153, 154
Pharmacists, chamber of, 502
Pharmacopoeias, 505, 508
Pharmacy, distribution, 509–510
— regulations, 499–502
— teaching of, 497–499
— nineteenth century, 511–512
— *see also* Apothecary
Pharmacy jars, 510–511
Phlebotomist, duties at Valletta Holy Infirmary, 54
Phlebotomus fever, 247
Phthisis, *see* Tuberculosis
Physicians, at Central Hospital, 84, 85
— at Santo Spirito Hospital, 32
— at Valletta Holy Infirmary, 41, 51, 52, 54
— education of, 445–448
— fees, 493–495
— government, qualifications, 85
— for the Poor, 348
— Jewish, in fifteenth-century Malta, 14

Physicians, licensing of, 468
— naval, under Order of St. John, 125–126, 129–131
— police, 348–350
— pensions, 492–493
— Princeps medicorum, duties and status, 274
— Protomedicus, duties, 274, 275
— qualifications required, 466
— regulation of, 283
— salary, 347, 488–492
— status of, 481–486
Pietà, Deaf Children's Unit, 363
Pimpinella anisum, 504
Pitanziere, 405
Plague, bubonic, 25, 44, 154, 164–191, 295, 296, 299, 422, 423, 428, 566
— — burial grounds, 339
— — epidemic, 1270, 12, 164
— — — 1348, 12
— — — 1427–28, 13, 164
— — — 1453, 13, 164
— — — 1501, 164
— — — 1519, 164
— — — 1523, 164
— — — 1592, 165–170
— — — 1623, 170–171
— — — 1655, 171–172
— — — 1675–76, 172–175, 487
— — — 1813, 97, 293
— — — 1813–14, 175–187, 471
— — — 1917, 187–189
— — — 1936–37, 189–190
— — — 1945–46, 190–191
Plague Hospital, Valletta, 307
Plastic surgery, 536–537
Pneumonia, folk remedy, 432
Poliomyelitis, 153, 262–264, 566
Polydactyly, in Neolithic man, 5
Poor House, Floriana (St. Vincent de Paul Hospital), 375–381
Population trends, during World War II, 567–568
Post-mortem examination, 539
Pregnancy, folklore, 429
Pre-natal clinics, *see under* Hospitals
Prison, female, attached to Ospizio, 377
Private practice, regulation of, 476
Pro Infantia Association, 359
Prostitutes, hospital for, 77
Prostitution, 71, 77, 224, 225, 226, 347, 377
— control, 225–230
Protomedicus, *see under* Physicians
Psychiatry, 144–145, 366–368
Psychiatry, establishment of chair, 458
Public Dispensary, Valletta, 348, 349
Public health and hygiene, 273–344
— administration, 273–284
— burial grounds, 339–344
— drainage, 321–325
— during World War II, 565
— education, lack of, 314
— housing, 279, 282, 326–338
— industrial health, 384–387
— in fourteenth century, 12
— quarantine, 201, 286–297, 306, 362
— sanitation, 8, 15, 282
— slaughter houses, inspection of, 350
— Società Medica d'Incoraggiamento, influence of, 542
— street hygiene, 309–315
— *see also* Welfare and communal care
Public Health Department, 109, 283, 297
Public Health Office, 238
Public Works Department, 313
Public Opinion, 230
Puerperal fever, 566
Pulmonary affections, 219

Quacks and charlatans, 470–472
Quarantine, 176, 286–297, 362
— descriptions of, 289
— laws, 285, 286, 290, 306
— Medical Officer, 281
— Superintendent General of, 275
— *see also* Lazaretto

Rabat, Santo Spirito (St. Francis' Hospital), 12, 23–36, 113, 263, 391, 477–479, 505, 509, 522, 561
— Saura Hospital (St. Nicholas), 381–382, 407, 522
Rabies, 248–250
Rationing, during World War II, 563–565
Refuse collection and disposal, 315
Registration of births, marriages, deaths, 277
Relief, outdoor, 106
Religion, and medical practice, 425–430
Rheumatic diseases, 63, 147, 153, 504
Rhodes, expedition to, 43
Rickets, 429
Rinella, lazaretto, 298
Ringworm, 153, 427
Royal College of Physicians of London, enquiry into leprosy, 212
Royal Commission, 1812, 105

Royal Naval Hospital, Bighi, 95–98
Royal Society of Medicine of Paris, 341
'Ruota', 27, 47, 69, 352, 353, 354

Sacred Heart Convent, temporary hospital, 562
St. Andrew's Hospital, 556
St. Anne's Hospital, Senglea, 383
St. Anthony's fire, 59
St. Bartholomew's Hospital, 562
St. Catherine, nuns of, 77
SS. Cosmas and Damian, *see* Gozo, St. Julian's
St. Dominic's Priory, temporary hospital, 182, 522
St. Edward's College, 100
St. Francis, Tertiary Order of, 383
St. Francis' Hospital, *see* Rabat, Santo Spirito
St. George's Hospital, 556
St. Ignatius Hospital, 556
St. John Ambulance Brigade, 401, 409–411
St. John of Jerusalem, abolition, 59
— amalgamation with Antonine Hospitallers, 59
— care of aged and infirm under, 375–377
— care of wounded and sick from Rhodes, 43
— cession of Malta to, 19, 37
— Commissioners of the Sick and Poor, 347, 348
— decline of, 58, 224
— disputes with Inquisitor, 52
— foundation of, 37–39
— Health Commission, 273
— hospital administration, 102
— — Holy Infirmary, Birgu, 37–44
— — Holy Infirmary, Valletta, 46–63
— — Hospital for Incurable Women, Valletta, 70–73
— — Hospital of the Italian Langue, 44–45
— — Santo Spirito, 23–36
— industry, regulation of, 384
— insane, care of, 364
— medicine and surgery under, 113–149, 466, 467, 473, 475–477, 479–481, 493–494
— midwifery under, 417
— naval medical services under, 118–131
— nuns of, 69
— nursing under, 391, 392, 393, 404
— pharmacy under, 499–501
St. John of Jerusalem, prostitution, regulation of, 224–228
— public health code, 224, 273–275
— public welfare, 347, 348
— quarantine under, 286, 298–299
— State medical service, 479–481
— surgery under, 132–143, 437–439
St. John the Baptist and St. Anthony of Padua Hospital, *see* Hospitals, Gozo, Victoria
St. John the Evangelist Hospital, Gozo, 13, 68, 69
St. John War Organisation, 263
St. Joseph of the Apparition, Sisters of, 206, 407
St. Joseph's Hospital, Zebbug, 206, 382–383
St. Julian's Bay, Forrest Military Hospital, 99, 556
St. Julian's Hospital (Hospital of St. John the Evangelist), Gozo, 13, 68, 69
St. Luke's Hospital, Valletta, 88, 89, 222, 223, 263, 362, 561
St. Luke's School for Nurses, 404
St. Nicholas Hospital, Rabat, 381–382, 407, 522
St. Paul's Earth, 506, 507
St. Paul's Home, Hamrun, 383
St. Paul's Hospital, 556
St. Paul's Tongue, 427, 506
St. Peter's Hospital, Mdina, 13, 68
St. Philip of Neri Convent, Senglea, temporary plague hospital, 182
St. Ursula, nuns of, 77, 406
St. Vennera, Centre for the Blind, 363
St. Vincent de Paul, Order of, 404
St. Vincent de Paul Hospital (Asylum for the Aged and Incurables), Floriana, 375–381
La Saluta Publica, 542
Sanctuary, rights at Holy Infirmary, 43, 55
Sandfly fever, 155
Sanitary and Statistical Department, 276
Sanitary Convention (1926), 297
Sanitary Laws, 282–283
Sanitary Office, 278, 280, 281
Sanitary reform, 282
Sanitation, domestic, *see* Drainage
— in Roman times, 8
— in fifteenth century, 15
— on galleys, 119–120
Santa Maria della Scala, Valletta, 67–76, 228, 364, 393–394
Santo Spirito Hospital, Rabat, 12, 23–36, 113, 263, 391, 477–479, 505, 509, 522, 561

Saura Hospital (St. Nicholas), Rabat, 381–382, 407, 522
Save the Children Fund, 360
Scabies, 153, 566
Scarlatina, 153
Scarlet fever, 13
School Medical Service, 362, 363
Scilla maritima, 504
Scrofula, 153
Scurvy, 63, 64, 123, 124, 135, 524, 525
Senglea, St. Anne's Hospital, 383
Sewerage, *see* Drainage
Sisters of Charity, 206, 403, 406–408
Skeletal remains, Roman, pathology of, 8, 9
Skin disorders, folk remedy, 433
Slaughter houses, inspection of, 350
Sliema, Kala Azar Clinic, 265, 361
— Malta War Memorial Hospital for Children, *see* Sliema, Zammit-Clapp
— St. John's Hospital, 556
— Tigne Hospital, 556
— Zammit-Clapp Hospital, 95, 265, 361
Società Medica d'Incoraggiamento, *see under* Societies, medical
Societies, medical, 542–543
— — British Medical Association, Malta Branch, 246, 542, 543
— — British Nurses Association, 403
— — Malta Medical Society, 542
— — Medical Officers Union, 495, 543
— — Mothers and Infants Health Association, 359
— — Pro Infantia Association, 359
— — Royal Society of Medicine of Paris, 341
— — Società Medica d'Incoraggiamento, 249, 255, 284, 340, 367, 377, 401, 542, 545
Spinola, St. David's Hospital, 556
— St. Patrick's Hospital, 556
State Registration for Nurses, 404
Statistics, registration of births, marriages, deaths, 277
— social, Office of, 276
Street hygiene, 309–315
Streptococcus melitensis, 241
Surgeons, at Central Hospital, 84, 85
— at Santo Spirito Hospital, 32, 33
— at Valletta Holy Infirmary, 51, 52, 54
— education, 437–445, 460
— government, qualifications, 85
— licensing of, 468
— naval, under Order of St. John, 126–131
— pensions, 492–493
— promotion, 85–86
Surgeons, regulation of, 283
— salaries, 488–492
— status of, 481–486
— *see also* Barber-Surgeons
Surgery, abdominal, 142–143, 537–538
— advances in, 533–535
— chest, 142–143
— eye, 535–536
— operating theatres, 530–531
— orthopaedic and plastic, 536–537
— practice of, 465–496
— under St. John of Jerusalem, 132–143
Surgical instruments, 133, 531–532, 533
Swellings and sprains, folk remedy, 431
Syphilis, 71, 135, 225, 231, 503
— *see also* Venereal disease

Tertian fevers, epidemic, 157, 158
Tertiary Order of St. Francis, 383
Tetanus, 135, 136
Thirty-Ninth General Hospital, Mellieha, 258
Tobacco cultivation as cause of malaria, 157
Tongue of St. Paul, 427, 506
Trachoma, 153, 235–239, 405, 566
Trachoma Board, 239
Trachoma Committee, 239
Trephination, 7, 115, 140, 534
Tuberculosis, 63, 64, 99, 153, 218–223, 283, 392, 566
Turkish medical organisation, during Great Siege, 1565, 115, 116
Typhoid fever, 269, 283, 319, 539, 566
Typhus, 269–270

Undulant fever, *see* Brucellosis
Undulant Fever Committee, 245
University of Malta, 448, 449, 451–454
— foundation of, 445
— recognition of medical degrees and examinations, 463, 464
Urinary system, disorders, folk remedy, 432

Vaccination, smallpox, 251–256
— BCG, for tuberculosis, 220, 221
— influence of Società Medica d'Incoraggiamento, 542
Valletta, Baviere Hospital, 556
— Casa delle Alunne, 77
— Civil Hospital for Men, 77–82, 236, 365, 455, 533, 534
— Falanga, 232, 233

Valletta Foundling Hospital (*see also* Valletta, Orphan Asylum), 69, 348, 353, 355
— General Hospital, *see* Holy Infirmary
— Holy Infirmary, 46–67, 77, 132–143, 228, 352, 391, 392, 396, 467, 470, 500, 556
— Government Dispensary, 348, 349
— Incurable Women (Santa Maria della Scala, Casetta, or Ospedaletto), 69–76, 228, 364, 393–394
— lazaretto, 166–168, 181, 298
— Lock Hospital, 232–234
— Magdalen Asylum, 227
— Military General Hospital, 95, 556
— Orphan Asylum, 82, 355, 407
— Plague hospital, 307
— St. Elmo Hospital, 556
— St. Luke's, 88, 89, 222, 223, 263, 362, 561
— Santa Maria della Pietà, 69–70
Venereal disease, 63, 71, 81, 126, 127, 225–234
Venereal Diseases Ordinance, 1920, 230
Venereal Diseases (Treatment) Act, 1948, 231
Venereal Diseases (Treatment) Regulations, 1943, 231
Verdala Palace Hospital, 263
Vertigo, trephining for, 140
Villages, sanitary state of, 331–332
Victoria Hospital, Gozo, 90–92
Vittoriosa Military Hospital, Birgu, 98

Water supply, 13, 136, 282, 316–320, 527, 565
— as source of cholera, 209, 318, 319
— — — — malaria, 157, 160, 161, 319
— — — — typhoid epidemic, 1910, 319
Weekly Rest (Bakers and Barbers Act), 1933, 386
Welfare and communal care, 347–387
— aged and infirm, care of, 375–383
Welfare and communal care, child welfare, 9, 74, 352–363, 405, 429, 430
— — clinics established, 359, 360
— — education, 362–363
— — education of mothers, 358, 359
— — foundlings, 25–27, 42, 48, 352, 353, 377
— — school medical service, 362–363
— insane, care of, 364–374
— *see also* Public Health
Women, care of poor, 347
Women's Hospitals, *see* Hospitals, Women's
Workmen's Compensation Ordinance, 1920, 386
Workmen's Compensation Act, 1929, 386
World War I, impact on medicine, 555–557
— Malta as military and naval hospital, 320
World War II, impact on medicine, 558–568
Worms, intestinal, epidemic of, 526, 527
Wounded, care of, 135–136, 534
Wounds, treatment, 114, 115, 133, 134, 432

Yellow fever, 269

Zabbar Government Elementary School, as cholera hospital, 206
Zammit-Clapp Hospital, Sliema, 95, 265, 361
Zammit's test for Brucellosis, 244
Zebbug temporary plague hospital, 182
Zetjun School, temporary cholera hospital, 206

Wellcome Library
for the History
and Understanding
of Medicine

Paris
Montpellier
Florence
Ro
Palermo
Tunis
Gozo
Ma
100
0
500 Miles

ples
lerno
Constantinople
Rhodes
Candia
Cyprus
Jerusalem
Alexandria

ordered a carefully controlled investigation, and the investigating commission reported adversely on the system several months before the Royal Commission of Louis XVI issued its famous condemnation.

This is no narrow record for specialists. Dr. Cassar has based his story broadly in the social and political history of the Island, showing very clearly how war and trade both brought in their wake appalling epidemics of plague, cholera, leprosy and other diseases, and how these epidemics in turn had a profound influence not only on the development of public health and social legislation, but on the whole economic life of the people.

The author has delved deeply into the archives, largely unpublished, of the Royal Malta Library and the Medical and Health Department. Frequent extracts from the journals, diaries and letters of visitors to the island through the centuries provide a fascinating supplement to the official records, showing the medical history of Malta as a vital force in the general history of the Island.

Dr. Paul Cassar was born and educated in Malta. After qualifying in medicine at the Royal University of Malta he gained the Diploma in Psychological Medicine in the United Kingdom. He is now on the teaching and examining staff of the Department of Medicine of the Royal University of Malta and a member of the Malta Historical Society. Besides papers in his speciality, he has contributed to historical journals in Malta and abroad.

PUBLICATIONS OF THE WELLCOME HISTORICAL MEDICAL LIBRARY

(*General Editor:* F. N. L. POYNTER, PH.D.)

Catalogue Series

No. 1. A catalogue of Printed Books in the Wellcome Historical Medical Library, Volume I. Books Printed before 1641. With a Foreword by Sir Henry Hallett Dale, O.M., G.B.E., F.R.S., M.D., F.R.C.P. 4to. pp. xvi, 407, double columns, with indexes of towns and printers. Price: £10. 10*s.* 0*d.*; $30.00 post free.

No. 2. Catalogue of Western Manuscripts on Medicine and Science in the Wellcome Historical Medical Library. By S. A. J. Moorat, Keeper of Western Manuscripts. Volume I. MSS. written before A.D. 1650. royal 8vo. pp. xiii, 679; col. front., 11 indexes. Price: £10. 10*s.* 0*d.*; $30.00 post free.

Historical Monograph Series

The Wellcome Library's Historical Monograph Series comprises only works of a scholarly character on the history of medicine or the allied sciences which are too specialised to come within the scope of a general publisher.

No. 1. Keynes, Sir Geoffrey, Dr. Timothie Bright (1550–1615): A survey of his life with a bibliography of his writings. pp. viii, 47, 17 *illus.* 1962. 21*s.* ($3.50).

No. 2. Dewhurst, Kenneth. John Locke, physician and philosopher: A medical biography. pp. xii, 328, 11 *plates*, 1963. 42*s.* ($7.00).

No. 3. Bonser, W. The medical background of Anglo-Saxon England. A study in history, psychology and folk-lore. pp. 450. 1963. 50*s.* ($8.00).

No. 4. Wright-St. Clair, R. E. Doctors Monro: A medical saga. pp. xiii, 174, *ports.* 1964. 30*s.* ($5.00).

No. 5. MacKinney, L. Medical illustrations in medieval manuscripts. pp. xix, 190 (+ index), 18 *col. plates*, 86 *black and white plates*, 1964.

No. 6. Cassar, P. The medical history of Malta. about 536 pp., 18 *illus.* 1964. 75*s.* ($12.00).

All volumes may be ordered from your usual bookseller or agent, or direct from the Wellcome Library (The Wellcome Building, 193 Euston Road, London, N.W.1.)